

Medical Library

JAN 10 1945

Rhode Island **MEDICAL JOURNAL**

DECEMBER, 1944



Volume XXVII, No. 12

Contents Page 639

**THE RHODE ISLAND MEDICAL SOCIETY
THE RHODE ISLAND DENTAL SOCIETY
HOSPITAL ASSOCIATION OF RHODE ISLAND**



PEACE ON EARTH

...TO MEN OF GOOD WILL

That all men everywhere may breathe again as free men ☆ ☆ That suffering and oppression may vanish forever from the earth ☆ ☆ That all men may regain their self-respect ☆ ☆ That the labor of all men may be devoted to the good of mankind ☆ ☆ That the pain and the hurt of all men be mercifully healed ☆ ☆ That all may live in peace forever!

We, men and women of Wyeth... as one voice, make this wish. To the doctors and nurses in our Army and Navy in the far corners of the earth; to our doctors and nurses at home; to our druggists; we at Wyeth are proud to have been of service. Proud and honored to have received our third Army-Navy "E". To you, men and women of mercy—our hand and our utmost support at all times.



The RHODE ISLAND MEDICAL JOURNAL

VOL. XXVII

DECEMBER, 1944

No. 12

EYE SIGNS IN TWO HUNDRED DIABETICS*

HARRY C. MESSINGER, M.D.

The Author, *Harry C. Messinger, M.D., of Providence, Chief, Department of Ophthalmology, Rhode Island Hospital; former president of the New England Ophthalmological Society.*

SINCE the days of Naunyn it has been customary in speaking of eye troubles in diabetics to divide them into two groups: the young with rare or no eye-disorders but severe diabetes, and the old with mild diabetes and many eye-lesions.

This talk is based mainly on the observation of 200 people who came to me for relief of symptoms referred to the eyes. Twenty of the 200 did not know they were diabetics until it was discovered as a result of their visits to the office. The other one hundred and eighty were diabetics with the known duration of the disease from a few days to twenty-seven years in a woman aged fifty-four and twenty-two years in a man of twenty-seven. The average age of these cases was 61 years and 9 months. Eleven were 40 years or less. There were 49 men and 151 women.

The most frequent defects were in the retinae — retinal arteriosclerosis and allied conditions or complications such as hemorrhage and localized degenerations; retinal arteriosclerosis was present in the vast majority of cases, next most common was senile cataract — 86 cases. There were, however, 8 cases of eye-muscle paralysis, complete or incomplete, 9 cases of glaucoma, 3 were glaucoma simplex or chronic non-congestive glaucoma, five hemorrhagic glaucoma leading to the loss of 4 eyes and blindness in the fifth and one secondary glaucoma. There was one melanoma of the choroid.

One patient, a school-teacher had spent one week in a Hospital for introduction to a regimen of treatment for her diabetes. Her previous optical correction which had been working well until the fourth day in the hospital was O. U. +3.00 S = add +2.00 S for near. Refraction showed O. U. 20/20 without correction not improved, best near

O. U. +3.00 Sph. One week later refraction O. U. +3.00 S = add for near +2.50 Sph. A change in refraction is common where the sugar-level in the blood falls rapidly, sometimes the change is in the opposite direction, more plus. At any rate any diabetic not under control may show varying results and reduction of plus spherical correction should be made cautiously, usually only after re-examination.

Six patients had lost in all seven legs, several had lost toes, three were definitely obese, there was one case of epilepsy and two of primary anemia. Three were proven syphilitics, two with four-plus Wasserman tests. A strikingly unusual body type was noted in three patients, a broad stout body with slender arms and legs, and in one case with such a body there was a tower skull. There were 2 known to have cancer of the breast and one of the uterus. One woman seemed rather proud of possessing an "upside down stomach." Only such non-ocular conditions as were apparent or brought out readily in history-taking were noted. Hypertension was present in many but I have no significant or valuable figures as to it.

Cataracts

I have listed as cataract only those with changes causing reduction of visual acuity to less than 20/30 with optical correction; in some cases where retinal pathology was enough to itself reduce visual acuity I relied on the extent and density of the opacities as viewed with the ophthalmoscope. Of 86 cases of cataract 5 eyes in 4 people had been operated on by others, 7 eyes in 5 people by me.

During the 2 years 25 eyes were operated on in 22 people. There were good results in 21 eyes. The poor results were due in two cases to extensive hemorrhagic retinitis, in one to intra-ocular infection following operation and in one to retinal detachment and hemorrhage into the vitreous. Two intra-ocular post operative infections were cured by sulphur drugs, with good visual acuity. In the case of the intra-ocular infection which did not get good sight, the infecting agent is not known, the eye is healed and not irritable but is practically

continued on next page

*Presented at the Third Medical Colloquium conducted by the Department of Medical Sciences, Brown University, on November 17, 1944.

sightless. One of the cases of hemorrhagic retinitis later developed hemorrhagic glaucoma, but the other eye in this case had a good functional result. No individual was so unfortunate as to get a poor result in both eyes. During the same period 112 cataract extractions on non-diabetics there were 6 failures, none due to infection. My experience confirms the generally-accepted view that the operation for cataract is more hazardous in diabetics and that complications such as infection, irido-cyclitis and hemorrhage are more common. It seems advantageous, especially in diabetics, to get the lens out in capsule if possible. In so doing there is less danger of post-operative irido-cyclitis; there is more apt to be hemorrhage into the anterior chamber but this is balanced by the absence of lens-remnants.

The diabetic therapy must often be altered during the hospital stay of the cataract patient. I have noticed especially in the case of the patient who has been getting along well at home with a daily dose of protamine-insulin the post-operative course is unpredictable. If he has been well-controlled at home, and we do not intend to admit him unless he has been so behaving, he is put on a 1500-1800 calorie diet and the urine is tested every 4 hours for sugar, at least for the first 24 hours; insulin and food are given as indicated by the urine test. Two cases of cataract in young individuals will be described later.

In every cataract case diabetic or not the urine is tested before operation and 24 hours after operation. One of our cases showed sugar after the operation although three examinations during the 3 months previous to admission had not shown it; during the 10 days of his hospital stay he required 20-30 units of insulin daily; three months after discharge he was released from observation by his Doctor, was leading an active life and earning a living on a diet with only minor restrictions and using no insulin. In the same room with this patient was another man (also one of the 22 operated on) who had been using 40 units of insulin each day at home. During his ten days in the hospital he required none. So that in diabetics although we have reason for more dread of complications and poor results, operations should be done if otherwise indicated. One patient, 84 years old, who had a glycosuria hard to control, got a good operative result, although vitreous was lost at operation and the wound was slow to heal.

Retinopathies

Visible signs of retinal arteriosclerosis were present in the majority of these cases. By these signs I refer to narrowing of the caliber of the arterial branches with or without irregularity, pallor and nicking of veins at arterio-venous crossings. Because of the inability to see the fundi in

many cataract cases and the masking of probable signs of arteriosclerosis in cases where there was much hemorrhage, retinal oedema or degeneration I do not think numbers are helpful. One is more impressed by the occasional patient over 60 with normal-looking vessels. One in particular, a physician over 70 with pink arteries of good caliber, clear lenses and only complaining of poor near vision, a refraction case. In terms of sugar a definite diabetic but one whom, so far, age has not withered. I cannot give any figures as to hypertension but hypertension is a bad and not uncommon complication. Again let me speak of a Doctor, 56 years of age: he showed as one of the early cases in the series, narrow pale tortuous arteries and nicking of veins, but no hemorrhages or white spots; he frequently showed sugar in the urine but claimed he kept in good order by dietary care. About a year later he phoned that his glasses should be changed. As I started to examine him I noted labored breathing; and before I looked I knew I would see signs of malignant hypertension, blurred elevated discs, twisted pale arteries, buried here and there by pale, greyish retinal tissue, splashy hemorrhages, some along branches of veins white radiating glistening lines of shiny spots about the macula. This was the most marked case of either hypertensive or arteriosclerotic retinitis out of six. He lived about 6 weeks.

There is a type of retinitis seen only in diabetics; this is characterized outstandingly by small round hemorrhages, appearing to be from smallest visible dots up to pin-head in size. Blotchy hemorrhages, roughly circular but flat, are often present but are not characteristic. Sometimes these hemorrhages are the only signs of trouble seen; widely scattered, they are more numerous in the zone two or three disc-diameters from the macula but in most cases there are also round, glistening white spots in the retinal background; some of these are in clumps and remind one in outline of the shadow of a bunch of grapes. This type of retinitis, called retinitis diabetica, was present in twenty of these cases; more than I had anticipated. There were besides these 20 cases, 6 cases of severe hemorrhagic retinitis with wide-spread, large sized, hemorrhages in the vessel layer; two cases of retinitis proliferans where the hemorrhages are pre-retinal, in the very deepest retinal layers just beneath the vitreous, blood escapes often into the vitreous. One of these cases, a woman 46 years old when first seen, I had watched for 7 years; during the first three years there were repeated hemorrhages into the vitreous first of one eye and then the other. After each marked hemorrhage this patient would reappear in my office, usually ascribing the relapse to cheating, indulging in a dish of ice-cream or a piece of candy. For a while

large clot-like masses would be seen in the vitreous finally clearing, then there developed small pale elevations or separations of the retina, which later shrank somewhat; new coils of small vein-like vessels appeared in and about the pale elevated areas. In this case expected increase in the frequency and severity of the hemorrhages and the little separations and vitreous strands with resulting blindness, did not develop. After about two years the hemorrhages occurred less frequently and for nearly 4 years non occurred. The visual acuity at the end of 6 years was about 20/60 in each eye; with a pair of rather strong glasses of short focus she was able to read. Once before I saw retinitis proliferans in a woman of 37 (not in this series) who was a diabetic and pregnant. In her case in less than a year there were present only a few strands in the vitreous and only 2 or three small retinal defects. This course is exceptional. Recurrences are the rule, and visual loss usually is serious. This was so in one other case, who also had lens changes. He became blind, lost a leg from gangrene, and died. The 47 year old woman who did much better as to vision, died of coronary occlusion.

There were six cases of retinitis circinata, where there was much hemorrhage and loss of retinal background with glistening crystal-like masses in the perimacular area, but invading more or less the macula. These cases had low visual acuity; one of them also had gangrene of the toes, losing 3 on one foot. Three patients had thrombosis of a branch of the retinal vein; one of these later had hemorrhagic glaucoma and lost an eye. One patient had a small hemorrhage at the macula; the vessels appeared normal.

In all these cases it was notable that the retinal hemorrhages were slow to disappear. Although I could not examine them frequently, in the case of the hemorrhages seen early in retinitis diabetica I would note the exact location of a small hemorrhage and weeks later find what looked like the same hemorrhage, with the same contour, the same deep red color and in the same spot. Larger hemorrhages perhaps were not so persistent in these characteristics but they were never any less in size or number and progressively affected visual acuity. And, still in respect to retinitis diabetica, in no case did I see a white spot replace a hemorrhage; for a long while it was supposed that these spots represented the sites of previous hemorrhages; my evidence (agreeing especially with Friedenwald of Baltimore) is against it. Hemorrhage into the vitreous, even large ones, on the other hand disappeared in a few weeks, but tended to recur. From these cases I am confirmed in the opinion that diabetes is a contributing factor in the frequency, severity and persistence of retinal hemorrhage.

Neurological and General

Eye-muscle palsies were as follows: 6th nerve, 6 cases.

Incomplete 3rd nerve, three, two with ptosis.

7th nerve 1 — peripheral type.

Complex, 1 — involving the distribution of more than 1 nerve.

Marked disturbance of accommodation, four cases.

The sixth nerve cases all did well; in the 3rd nerve cases, all three were apparently residuals of more severe involvement and changed not at all. One complex case was of several months' duration in a man arteriosclerotic, hypertensive and diabetic.

I can offer little as to the neurological status of these cases or in fact of the 200 cases. Two of the 200 had corneal hypaesthesia on 1 side, one had hemi-anaesthesia of the face and anaesthesia of the fore-arms, wrists and fingers of both hands except in the ulnar distribution of one hand. There were 2 hemiplegias, two cases with mild mental disorders. In many cases atrophy of the interossei muscles of the hands was apparent, six volunteered the information that they had arthritis: one of these two had uveitis; we have not enough information about these cases and not enough cases to say much about the role of diabetes in intra-ocular disease involving the iris, choroid and ciliary body. Three patients had optic atrophy. 1 was a tabetic — 1 was a woman who had cataracts in both eyes and uveitis in both eyes, hemorrhagic retinitis 2 years after operation in the eye less affected by the uveitis and finally paper-white atrophy in this eye. This woman also lost a leg and at death had gangrene in the other leg. So far then we have seen impairment of vision due in the main to vascular disease and to degeneration of the crystalline lens, occurring in aging individuals; a group of 200 non-diabetics of the same average age would undoubtedly in general show the same sorts of trouble. The distinctly diabetic retinitis occurred only in the over-40 group but I have seen it in a patient 23 years old. We think we see as an effect of diabetes, more extensive and severe vascular lesions and more cataracts which seriously cut down visual acuity. It may be said that diabetics have all the eye-troubles that others have and do not do as well with them. Note that one patient had been operated on for cataract two years before diabetes was discovered and one other showed retinal arteriosclerosis four years before diabetes was diagnosed.

The Younger Diabetics

We spoke earlier of the cases 40 or less years of age. The opinion has been expressed that nowadays the young diabetics live longer and have more time in which to develop eye-disorders. This is

continued on next page

reasonable but not altogether satisfactory. Let's take these few cases individually:

1. A girl 7 years of age referred because of inflammation in one eye; this proved to be interstitial keratitis. Investigation showed other evidence of congenital syphilis including 4-plus Wasserman test. For one year sugar has been well controlled. Recovery from the interstitial keratitis; second eye has not shown involvement.

2. Agnes H., 17 — Lens changes diffused about the center of the pupillary area and just beneath capsule (case lost sight of)

3. Ruth O., 19 — Known duration 3 years — eyes negative, has headaches especially in the morning. I understand that following a change in the routine of eating and dosage of insulin these headaches disappeared.

4. William B., 23 — Severe diabetes — duration four years. Ptosis, severe hemorrhagic retinitis. Visual acuity 20/50 or less.

5. Dorothy S., 24 — a known diabetic for four years, showed extensive hemorrhagic retinitis. In spite of expert handling of her diabetes from the time of her first visit she developed such haziness of the lenses that when she visited another Oculist he made a diagnosis of cataract. Later the lenses became almost entirely clear. In about 6 months Hemorrhagic Glaucoma developed in the right eye and a complete retinal separation in the left eye. The right eye was saved but is sightless, as is the left. She looks well, her diabetes through all this is well controlled, she earns her own living.

6. John C., 27 — known diabetic 22 years, except for refractive error his eyes are normal, uses about 60 units of insulin daily. Active life as an accountant.

7. Elizabeth Y., 30 — known 2 years — normal.

8. Richard W., 31 — known for 6 years, normal except for refractive error — uses 40 units daily.

9. Thos. E., 39 — uses lots of insulin, often 90 units in one day. Has blurred vision at times for 1 or two hours. Attributes it himself to over dose of insulin (more than he needed at the particular time); blood-vessels and lenses normal.

10. Joseph S., 37 — hemorrhage at macula in one eye. In the follow-up his urine showed sugar but in later examinations it was not present. At an internist's office — Urine negative, Blood sugar — at normal level when fasting but very poor in glucose-tolerance test.

11. Carmine P., — 40, a man, known for 6 months, extensive retinitis with low acuity of vision.

Thus in these 11 cases we have 3 individuals with severe hemorrhagic retinitis with bad results as to vision, 1 case of macula hemorrhage in a man

of 37 with intermittent glycosuria and a poor record in the glucose-tolerance test.

The explanation has been given that in the course of years these young diabetics develop arteriosclerosis and therefore the retinitis. This explanation has been further elaborated by discussion of the effects of the relative amounts of fats and carbohydrates in the diet. None of these four cases with retinal hemorrhages had arterio-sclerosis by any signs such as narrowing and pallor of the visible retinal arterial branches or sclerosis of peripheral vessels nor does retinal arteriosclerosis show itself in my experience by hemorrhages before narrowing and pallor of the arterial stream is to be seen.

The two cases of lens changes represent the two types described in young diabetics. In one a girl of 17 we had only one observation; the visible changes were subcapsular. These may have remained unchanged or a full-blown cataract requiring removal of the lenses may have developed. Many of these cases have been reported and this lens change has been called a true diabetic cataract. Yet other cases have been reported in non-diabetics and I personally have had a case in a woman of 22, not a diabetic, where in one eye after 6 months from the first notice of visual loss, operation was necessary in one eye and in another 6 months it was indicated for the other eye. A better name is juvenile cataract in a diabetic or non-diabetic, as the case may be.

In the other case, where there was first noticed hemorrhagic retinitis, there appeared a diffuse bluish-gray haze throughout the lenses; this was not seen by me at its height but by another Oculist. I believe this is the only reversible cataractous change and it nearly disappeared in this case. I will not now go into a discussion of the reasoning about it.

I have gone over these younger cases in some detail because it seems to me that in general they have diabetes less complicated by other troubles such as hypertension and arteriosclerosis and that by consideration and study of them we may some day learn how to prevent or ameliorate the progress of retinal changes.

In our older patients, and in this series they outnumbered the younger about 16 to 1, we did find many eye-disorders which seriously affect sight. The diabetes was in most cases mild and there commonly were present hypertension, arteriosclerosis either or both, and in some senile changes; in others anemia or nutritional deficiencies. Except for the retinitis diabetica, a tendency to retinal hemorrhage and more rapid development of cataracts they do not differ much from others of the same age.

In the younger, we found 5 out of 11 with good eyes, except for refractive errors, one with a con-

continued on page 650

THE CONDITIONED REFLEX TREATMENT OF ALCOHOLISM*

JOSEPH THIMANN, M.D., of Boston

The Author, Joseph Thimann, M.D., Medical Director, The Washingtonian Hospital, Boston, Massachusetts.

ANYONE who has attempted to help an alcoholic to become an abstainer will admit that all the usual types of therapy have brought little success, if by "success" we understand no less than total abstinence. Any method of therapy claiming a high percentage of "cures" is easily reduced to what it really is if we inquire about the length of the period of total abstinence resulting from the treatment, how many records of patients can be produced, and what system of follow-up has been applied.

Neither hospitalization as such (whether by commitment or by voluntary admission to a luxurious sanitarium with very considerate, as well as considerable, "tapering off", or sudden withdrawal of alcohol, nor alcoholic farms, nor sedation, nor vitamins, nor gold injections, "drop treatment", benzedrine, nor even psychotherapy, including psychoanalysis, have brought more than meagre results.

Of course, I do not mean by this that hospitalization, alcoholic farms, benzedrine, and psychotherapy are not helpful adjuncts in the treatment of alcohol addiction. I use them and would not like to omit them. However, there is no doubt that their efficacy as eliminators of the craving for alcohol is rather small.

In fact, I suspect that the stepmotherly attitude toward the alcohol problem on the part of the medical profession has been to a great extent due to the discouraging results of the therapeutic methods mentioned above.

Under these circumstances, it was to the great merit of Lemere and Voegtlin of Seattle, Washington, that they inaugurated a treatment that approached the problem from a different angle, namely from the physiologic one.

Pavlov distinguishes two classes of reflexes:

(1) the *inborn* or *unconditioned* reflex, which is present in all members of a species, as, for instance, the extension of the leg on striking the patellar ligament, or the salivary flow as a response to the taste of food; and

(2) the *acquired* or *conditioned* reflex, which depends on the formation of new functional connections in the central nervous system and is therefore peculiar to the individual.

The first conditioned reflex experiments on dogs were conducted by Pavlov. He discovered that certain signal stimuli, like the sight and smell of food, are just as effective as the taste of food in evoking the salivary flow. This raised the question: Can any neutral stimulus, such as the ringing of an electric bell, be substituted for the natural stimulus in arousing reflex reaction? In putting this problem to test, the bell was sounded and kept ringing until after the food was presented. After about 30 trials, it was found that the sounding of the bell alone was sufficient to evoke the salivary flow. Thus a new reflex had been built up. At the same time, Pavlov found that:

(1) The *environment* must be controlled so that all stimuli more potent biologically than the ones under test are eliminated.

(2) Regarding the presentation of the stimulus: there are three possible ways of combining the neutral stimulus with the unconditioned stimulus. The bell may be sounded before presentation of food; simultaneously with presentation of food; or after the food is given. Only the first two methods result in a conditioned reflex. For the most efficient conditioning the new "neutral" or "conditioned" stimulus must not only *precede* the "natural" or "unconditioned" stimulus, but it must also *overlap* the other in point of time.

(3) The conditioned reflex will *fade* out gradually if the subject is exposed only to the conditioned stimulus for a long time without reinforcement by the combination of both the conditioned and unconditioned stimulus. In other words, if the ringing of the bell is used as a conditioned stimulus for a long period of time without the food (the unconditioned stimulus), the dog will finally stop secreting saliva when he hears it. Therefore, repeated reinforcements of the conditioned reflex are necessary.

Utilization of Conditioned-Reflex Laws

This new knowledge of the laws of the conditioned reflex was utilized for a therapy of alcohol addiction. The "neutral" or "conditioned"

continued on next page

*Presented at the Evening Institute of The Research Council on Problems of Alcohol, at New York City, June 20, 1944.

stimulus of the ringing bell was replaced by alcoholic beverages, the "natural" or "unconditioned" stimulus of food by an emetic. It was to be expected that, after an adequate number of conditioning sessions, the presentation of alcoholic beverages alone would provoke the same response as the emetic, i. e., the sight, smell, taste, or even the thought of alcoholic beverages would cause nausea and emesis.

In practice, several difficulties had to be obviated. The first experiments taught that sedatives and depressants inhibit the reflex. Thus, not only the conditioning had to be postponed until the alcohol from the last spree was eliminated and the central nervous system had recovered from the depressant action of the alcohol, but it was also necessary to time the giving of alcoholic beverages in relation to the emetic so that the ingested alcohol would be vomited before it was absorbed and before the patient became partly intoxicated, i.e. narcotized, and thus unable to develop a reflex.

Another problem was the choice of the right kind of emetic. There is a very powerful emetic that has, however, two unfavorable after-effects: a euphoric and an hypnotic one. The result of the euphoric state is that the patient, instead of feeling sick after the treatment, feels "fine", which does not promote development of the reflex of abhorrence and nausea. The hypnotic after-effect causes a sound sleep for several hours, with subsequent amnesia, which also is not conducive to the desired results.

Finally, however, after years of research and experimentation, the right kind of emetic, with all the desired properties and none of the disturbing ones, was selected and a careful and skillful technique was devised.

Voegtlin and Lemere started this treatment more than eight years ago. In their last follow-up report on 1194 patients, they give the following results. Total abstinence was maintained in 74.8% of 644 patients treated within the last two years prior to the report; 52.5% of 291 patients treated two to four years prior to the report; and 51.5% of 259 patients treated four or more years prior to the report.

The conditioned reflex treatment as given at the Washingtonian Hospital and several general hospitals in or near Boston differs from the technique of Lemere and his associates in the formula of the injectable solution, in the dosage, and in some other technicalities.

More important than the differences in technique, however, is the fact that the establishment of a conditioned reflex is only one element in a tripartite plan of treatment, the other two elements of which are a part-time protective environment and supplemental psychotherapy, as described below.

The treatment is given in an initial series of four to eight daily sessions, followed by one-day reinforcements, at varying intervals, during the first year. These reinforcements are also the supportive framework for regular contact between the patient and the therapist. Some of my patients have requested that the reinforcements be extended over a second year in order that they may achieve a wider margin of safety. The happiness and gratification with the results of most of the "conditioned" patients is such that they are willing to return from a distance, such as Canada or Ohio, for the one-day reinforcement, notwithstanding the fact that the treatment is anything but a pleasure.

For the initial series of treatments, as well as the one-day reinforcements, hospitalization is indicated. As the treatment is given only to voluntary patients, any general hospital will serve the purpose.

Selection of Patients Important

The results of treatment depend largely on the selection of patients suited to this type of therapy. There are patients who are primarily promising and other patients in whom the chance of a successful outcome is poor. Some patients have only the *one* outstanding difficulty, the alcohol addiction. Otherwise they are relatively well adjusted, predominantly extrovert, have a successful working history, and good social and professional contacts. Such patients developed their addiction mainly by way of social drinking. In this type of patient, the elimination of the craving for alcohol by means of the conditioned reflex treatment, and sometimes even without supportive psychotherapy, is often sufficient for full rehabilitation.

In those cases where the addiction is *not* developed by way of social drinking, but is caused by an underlying neurosis of emotional instability, the elimination of the craving for liquor by means of the conditioned reflex treatment is only the elimination of a symptom. Psychotherapy of such patients, however, is made easier and has more chance of success if the patient has first undergone the conditioned reflex treatment. The psychotherapy is not then interrupted by drinking bouts and is facilitated by the patient's regained self-assurance. In *some* of these cases, too, the regained total abstinence, with all the emotional and economic assets involved, may be sufficient to help in improving the neurosis, even without psychotherapy. The masochistic traits with feelings of guilt, so common in neurotics, seemingly find gratification in the fact that the treatment is, as they say, "tough" and that they are atoning for their guilt. There is also a sense of heroic accomplishment as compensation for their inadequacies.

If there is a promising and an unpromising age group, patients between the fourth and fifth

decades have seemed to respond most favorably. In these patients their relative maturity, economic stability, and family responsibilities and attachments help to outweigh the alcohol addiction. Of course, the home situation can be an asset, or it can be a serious liability that will destroy the patient's chances. For instance, an aggressive, domineering wife or mother may be a very serious complicating factor that, under some circumstances, may prevent any rehabilitation. Also a wife who is what she calls a "social" drinker, and who sees no reason to give it up because she can "handle" her own drinking, may vitiate any attempts at changing her husband into an abstainer.

Physical contraindications to the treatment comprise in the main the cardio-vascular-renal syndrome, hepatic cirrhosis with or without esophageal varices, hernia (unless guarded), active peptic ulcer, or history of recent hematemesis and active psychosis.*

Protective Environment and Follow-Up Therapy

Of great help in the process of readjustment, especially for neurotic patients, is the part-time protective environment afforded by boarding at the hospital, while working full-time outside. The patients leave for their work after breakfast and return, when they are through work, straight back to the hospital. Also during weekends and holidays (the time when they have just received their pay-checks and are somehow less under control than on weekdays), the patients enjoy the protective environment of the hospital. Gradually their privileges are increased, the patient is more and more exposed to an unsupervised environment, the protection is reduced to weekends, and finally also this is abolished.

Quite an efficient factor in the follow-up therapy are the meetings of the Abstinence Club, or as they like to call it, the Conditioning Club, of our treated patients. These meetings give an opportunity for the men to meet together socially with other men with like problems and difficulties, and serve to re-enforce their regained self-respect and self-assurance which had been lacking during their decades of drinking. They readily contribute to the expenses of the administration of "their" club and one member celebrated his twentieth month of abstinence by donating to the Club the quite substantial fee for the treatment of a promising alcoholic. The club meetings afford also a chance for group therapy.

I have given the conditioned reflex treatment to 126 patients up to date. Of these, 53 had the treatment in 1942, 47 in 1943, and 26 in 1944. Of the

*Quoted from "The Treatment of Alcoholism by Establishing a Conditioned Reflex" by Walter L. Voegtlin. *Am. J. Med. Sc.* 199: 802-810, June, 1940.

53 patients who took the conditioned reflex treatment in 1942, 45.2% are still abstinent. Of the 47 who had the treatment in 1943, 74.4% are still totally abstinent. Of the 26 patients who have undergone this treatment during 1944 to date, 23 or 88.4% are still abstinent. Thus, out of 126 patients who have taken the treatment since I started it in February 1942, 99 are still totally abstinent, or a percentage of 71.4. This figure includes 6 patients who tried to drink once, reacted with the expected nausea, returned voluntarily for re-treatment, and have remained abstinent since.

In conclusion, our experience with the conditioned reflex therapy over a period of 2½ years leads us to believe that this treatment, if applied correctly to selected patients and, if necessary, combined with psychotherapy and a part-time protective environment, represents the most promising treatment for alcohol addiction up to date.

By way of illustration of the problem the following Case Reports are submitted:

Habitation

No. 571 — F. A. H.

Age, 48.

Occupation — General Agent.

Education — High School, Preparatory School, College.

First admitted March 8, 1941, moderately intoxicated.

Alcoholic History — Patient had his first drink at the age of 23. From 1920 until 1931 the patient lived in the South. He did not drink during the summers at all. In the fall and winter he drank periodically. Prior to bout on admission, he was abstinent for 14 months, with the exception of two drinks. He then started drinking on week-ends, when he had to entertain professionally the officials of the railroad. He drank more than he should because of sociability and fellowship. After a few drinks "anything is funny and brighter, the sidewalks are wider, his voice seems stronger". The next morning, he felt horribly low and then took a drink. He got along with wife fairly well, but later admitted infidelity of his wife as a source of difficulty.

There were two subsequent admissions in 1941 and one in March 1942. Between April 6th and April 14th, 1942, the patient was given the conditioned reflex treatment, with seven reinforcements, the last one on March 10th, 1944. He is totally abstinent to date and active in the Conditioning Club.

Problem Drinking

No. 1362 — D. M.

Age, 42.

Occupation — Wood caulker in shipyard.

continued on next page

This patient left school at the age of 14 and secured a job as an apprentice in a shipyard. After finishing his apprenticeship, he continued working at the shipyard until 1926, when he obtained a job, under Civil Service, in a Navy Yard as a "wood-caulker first class or shipwright second class". In 1932, during the depression, he was released from this job and secured employment in a Navy yard in another city. He stayed there until 1935. It was during this period of separation from his family and loneliness that he began to drink heavily. He returned to Boston and was re-employed at his old job for about four years. He continued drinking heavily, however, and was jailed for a period of ten days and later sent to Bridgewater State Farm for six weeks. Finally, in 1939, he lost his job and at the time of his first admission to the Washingtonian Hospital, in February, 1943, he was unemployed, had been arrested about fifty times and had been in Bridgewater six times. When under the influence of alcohol, he was vicious and belligerent. In January 1943, he got into difficulties with the watchman of an industrial plant and was given a year's suspended sentence to Bridgewater. Because the patient was afraid of being sent to Bridgewater for life, and also because he feared he would "lose his mind", he sought help from the Court Probation Officer, who arranged for examination at the Peter Bent Brigham Hospital. He was examined there by a psychiatrist, who advised treatment at the Washingtonian Hospital. He was admitted on February 16th, 1943.

After two weeks' hospitalization, the patient returned to his work at the shipyard on working parole. In this way he was given the opportunity of earning to pay for the conditioned reflex treatment. The initial series of this treatment was given him between May 3rd and May 9th, 1943. The patient continued boarding at the hospital until December 16th, 1943. At this time, he remained away from the hospital for 15 days, but returned of his own accord. He did not drink during this interim and was quite proud of the fact that he had remained abstinent during the emotional period of the Christmas holidays. He continued on working parole until February 10th, 1944 and during this entire period of hospitalization received four reinforcements of the conditioning treatment. On March 4th he returned for his fifth reinforcement treatment.

Personality. The patient was a very insecure, unstable person, with a great many fears and anxieties. He was his mother's favorite and she favored him above the other children, always giving him the best and the most. His father, on the other hand, was deeply religious and a strict disciplinarian. His wife was older than he and as-

sumed complete responsibility for managing the income, paying the bills, planning for the family, etc. There were four children and at the time of admission to the Washingtonian Hospital, the family were receiving assistance from public welfare.

The Social Worker was of great assistance in this case, in interpreting addictive drinking to the patient's wife, in assisting the family to plan the patient's earnings so that a number of back bills were paid up, and in arranging for a number of examinations for the patient in hospital out-patient clinics in order to relieve his anxiety in regard to many physical complaints.

The patient came in as an out-patient several times. He is not drinking and has no desire to drink at any time, and his wife and children are happy.

EYE SIGNS IN TWO HUNDRED DIABETICS

continued from page 646

dition due to syphilis, four with retinal pathology, especially retinal hemorrhages, one of these four also had lens changes and one case with normal retinae but with cataract. In these five it is reasonable to consider diabetes an important etiological factor.

So Naunyn's dictum in so far as it speaks of the young with severe diabetes and rare eye-disorders is not substantiated by these observations. As a generalization, taking in all diabetics, those without as well as those with eye-complaints, it is still good. Generalizations such as this are pleasing to the "ordered" mind but they explain very little and while expressing a part-truth are not satisfactory to the "inquiring" mind.

Previously I said "diabetics have all the eye-troubles that others have and do less well with them". This is another generality which sounds well but is not the whole truth. It fails to cover all the known facts. In 4 out of 11 young diabetics we had retinal hemorrhages lowering visual acuity, we had 20 cases with retinal hemorrhages of a type seen only in diabetics, we found more anterior chamber bleeding in diabetics after lens extraction; individual retinal hemorrhages in diabetics were slow to disappear and in general retinal hemorrhage did not regress and we saw more blood in the retinae of the older diabetics than in non-diabetics of the same age, whatever other changes were seen.

This tendency to bleed from the small vessels seems to me to point to the need of further study of the permeability of their walls. If arteriosclerosis only is the answer it should be shown by consideration of *all* the evidence and not be assumed because there is *some* evidence to support it.

The RHODE ISLAND MEDICAL JOURNAL

*Owned and Published Monthly by the Rhode Island Medical Society,
106 Francis Street, Providence, Rhode Island*

EDITORIAL BOARD

PETER PINEO CHASE, M.D., *Editor-in-Chief*, 122 Waterman Street, Providence

JOHN E. FARRELL, *Managing Editor*, 106 Francis Street, Providence

CHARLES BRADLEY, M.D.	East Providence	EDWARD B. MEDOFF, M.D.	Woonsocket
ALEX M. BURGESS, M.D.	Providence	EMERY M. PORTER, M.D.	Providence
JOHN W. HELFRICH, M.D.	Westerly	MARY E. ROHR, M.D.	Pawtucket
LUCIUS C. KINGMAN, M.D.	Providence	ALFRED M. TARTAGLINO, M.D.	Newport
JOHN LANGDON, M.D.	Providence	GEORGE W. WATERMAN, M.D.	Providence
GEORGE L. YOUNG, M.D.		East Greenwich	

COMMITTEE ON PUBLICATION

HAROLD G. CALDER, M.D., *Chairman*, Providence

PAUL APPLETON, M.D., Providence

ELIHU S. WING, M.D., Providence

AUGUSTINE W. EDDY, M.D., Woonsocket

WILLIAM P. BUFFUM, M.D., Providence

"UNSCRUPULOUS DOCTORS"

The Providence Journal has editorially expressed such grave concern regarding the possible sabotage of the state cash sickness fund by collusion of unscrupulous workers and unscrupulous doctors that we in turn have become a bit concerned about the Providence Journal.

We recognize the outstanding position this newspaper holds in our community, and we recognize the importance of bringing to the attention of the public generally the report of the prosecution of the four workers who defrauded the Sickness Fund. But the editorial comments on this report are as confusing and as misleading as some of the war news headlines which have won and lost twice as many battles as have been fought.

For example, the Providence Journal, in an editorial on November 15, stated in part as follows:

"However, we suggest that the punishment of individuals who collect benefits fraudulently, as essential as that is, is not in itself enough. Nobody can collect a claim against the Cash Sickness Fund without active cooperation of a physician, who must certify that the claimant is in fact ill and unable to work.

"It is entirely within the realm of reason that a person might be able to fool a doctor for a week

or two into believing he was ill, but when the "illness" extends over a period of four weeks, as it did in one of the cases prosecuted, or of six weeks, as it did in another, the physician who certifies the case for benefit payments puts himself under suspicion either of being indifferent to his obligation to the State or of conniving with the claimant to defraud the State.

"Punishment of those who actually collect the money ought to be followed in every instance by an inquiry as to the circumstances under which the attending physician certified the claim, to the end that the possibility of collusion between unscrupulous workers and unscrupulous doctors may be prevented. The vast majority of those in the medical profession certainly are above becoming party to a fraud, but, as in every profession, there is a minority who are not. It is this minority that the Compensation Board must keep an eye on and move vigorously against whenever it finds evidence warranting it."

Now as for the facts in the case.

In its first year of operation the sickness fund had more than 33,500 claims filed against it and it paid out 3½ million dollars in benefits. We do not know how many more claims have been filed since last April or how much money has been paid

out. Out of all these claims four workers obtained a total of \$217 by deceiving

- 1) their employer, for they worked and drew compensation at the same time.

- 2) the sickness fund administrators who failed to discover the fraud until long after its perpetration.

- 3) the certifying physician who could have recognized a reported ailment and agreed that the patient should not work although he might have done so without the physician knowing it; for, in accordance with the law which specifically states that the "act shall be construed liberally in aid of its declared purpose which declared purpose is to lighten the burden which now falls on the unemployed worker and his family," the physician could have certified to the disability honestly according to his training in the healing art and left the denial of continuance of benefits to the Board's paid staff of examining physicians.

The law stipulates that the protected employee may claim disability predicated on his physical or mental condition. It remained for the Board to make the rule that a physician must certify as to the disability. That certification, however excellent and honest, is open to challenge and denial by the Board. Thus we have the situation where worker A with the same disability as worker B, but physically different and requiring longer convalescence, is supposed to recover in the same period of time as B; otherwise he faces possible denial of cash benefits.

And who, other than the Providence Journal, blames the medical profession for the mechanical faults of a social insurance program upon which it was never consulted, and over which it has no jurisdiction? There are six professional groups licensed under the statutes and all are eligible to certify a claim for cash sickness benefits. The assumption that there was any collusion by any physician to perpetrate a fraud is a rash one; to imply that medical doctors abetted such a plan is adding insult to the injury.

The cash sickness act was drafted and enacted without any advice or counsel from the physicians of Rhode Island. In spite of the obvious faults and difficulties which have become apparent following the drafting of Board regulations that place the concept of sickness within the meaning of social insurance which is not identical with sickness as regulated by medical science, the medical doctors have cooperated to the best of their ability in the honest administration of their phase of the program. The act needs amendment and clarification to solve existing problems.

The Providence Journal, as the largest newspaper in the State, failed to inform the public fully and clearly regarding the sickness act during its 20-day passage through the Legislature so that

everyone might understand the personal application of the law and not merely its social objective. If its present intention is to make up for that indifference, as well as that of employers and the public generally to the ramifications of this compensation measure, then there are far more vital tasks than the attempted shifting of the blame for the first frauds against the fund to the physicians of Rhode Island.

DR. J. HENRY MANNING

The man who attains distinction and honor in his chosen profession and who at the same time devotes unselfishly of his leisure hours to serve his fellow citizens in the administration of public policies and laws is indeed rare. Dr. J. Henry Manning was such a man.

A practising dentist in Providence since the turn of the century, Dr. Manning was one of the first in his profession to champion the cause of better dental legislation for the protection of the public. His efforts were instrumental in making the dental statutes of this state among the first in the country, and his colleagues honored him on two different occasions with the Presidency of the Rhode Island State Dental Society.

Not content to serve only his profession, Dr. Manning early developed a keen interest in public affairs, and this interest led him to seek public office. For twelve years he served with distinction as a member of the Providence City Council and in 1924 was the president of that body. He was once the choice of his party as candidate for Mayor of Providence, but he was defeated in this quest. In 1934 he was returned to public office as a state representative, a post he subsequently held until this year.

The profession he honored has indeed lost an outstanding member. The community he served has lost a valued public servant.

EXCHANGING VIEWS

Your Editor and Executive Secretary have been to the Annual Conference of State Secretaries and Editors at Chicago. One day and a half including an evening dinner and discussion were given to consideration of the most vital problems concerning the Medical Profession.

Dr. Herman L. Kretschmer, President, and Dr. Roger I. Lee, President Elect of the American Medical Association gave us informative and stimulating talks and Morris Fishbein, Editor of the Journal of the American Medical Association furnished us one of his keen, rapid fire and pertinent discussions. There were representatives there from Washington to Florida and Massachusetts to Southern California all giving of their hoarded time to consider some of our many vexing questions.

And as usual there were small side meetings of groups where the men "took their hair down" and talked more frankly and intimately of their pet topics than could be expected in the formal meetings.

It is hardly worth while to summarize the deliberations. Of course nothing much was solved. Rarely do our social troubles reach a quick and easy solution like this. But a large group traveled far and applied themselves diligently to these tasks.

It is a pleasure to pay tribute to our parent organization and the officers who made possible and arranged this opportunity for us to air and compare our views. Dr. West is not only highly efficient but delightfully gracious as the guiding spirit.

In the opinion of one person at least the ideals of the Medical Profession and the way they have been carried out are outstanding among human achievements. But the public led on by agitators have decided largely to ignore the manifest abuses of the law, business, advertising, etc. which make our ways seem Utopian and they are going to put lace on all our lingerie before they tackle the really dirty clothes.

All we can do is recognize this and continue to confer that we may seek out ways to direct the sewing circle ourselves. That is the one distinct impression brought home from Chicago.

A STATE CANCER COMMISSION

In 1941 the Rhode Island General Assembly placed on the statutes the act which make obligatory that any physician knowing or having reason to know that a patient treated or visited by him has cancer in any of its forms report the date to the State Health Department. A year later the Assembly passed legislation which authorized the State Health Department to set standards for cancer units in general hospitals, to conduct cancer control educational programs and to provide a plan to care for needy cancer patients. To carry out the latter program the sum of \$15,000 was appropriated, and this grant has been continued each year since.

The war, demanding as it has so many doctors, undoubtedly has prevented in some measure the development of a Cancer Division within the state health department. However, if the data accumulating as the result of the 1941 legislation is to provide its intended purpose—the compilation of vital statistics relative to the incidence of the disease in all its peculiarities—and if the wishes expressed by the Assembly when it appropriated public money two years ago are to be fulfilled, there is need for some advisory group to co-ordinate the cancer control program in Rhode Island.

The recommendation that has been advanced by the Cancer Committee of the Rhode Island Medi-

cal Society that there be a State Cancer Commission, created and established by legislative action, to serve in an advisory capacity to the director of health to formulate what will be long range plans in cancer care, treatment, and education, is worthy of adoption. Similar commissions have been instrumental in the operation of successful programs in Maine, New Hampshire, Vermont and Connecticut.

RED CROSS AUTHORIZATIONS

PROVIDENCE CHAPTER

THE AMERICAN RED CROSS

HOME SERVICE DEPARTMENT

228 WEYBOSSET STREET, PROVIDENCE 3

November 15, 1944

Mr. John Farrell
Rhode Island Medical Society
Francis St.
Providence, R. I.

Dear Mr. Farrell:

Due to the fact that the Red Cross Home Service has met with some difficulty in the plan for authorization of doctor's calls to service-connected families, any call placed by a Red Cross worker in behalf of a family with the doctor's exchange automatically authorizes the payment of the doctor's visit to the family and the doctor will be reimbursed by Red Cross as per our agreement of \$3.00 for a home visit.

If a doctor is called to visit a family and is told that Red Cross will pay for the call, we request that the doctor telephone to DEXTER 2155 and find out whether or not the call has been authorized.

We find that some abuse of the fact that Red Cross will authorize a visit by a doctor has occurred and that some families which Red Cross does not know has stated that Red Cross will pay the bill. This agreement is for the protection of the medical profession as well as Red Cross. Red Cross is on 24 hour a day service and we will make every effort to keep a listing of the calls which have been authorized so that there will be no delay in receiving an answer to a doctor's request.

At this time let me once more express our appreciation in behalf of the servicemen, their families and the Military for the splendid cooperation which the medical profession in Rhode Island gives to us in verifying the need for emergency furloughs and for extensions. We recognize how great an obligation this is to the many busy doctors in this city. As you know we make these verifications with the medical profession at the request of the Military Officers and Naval Officers and it is only through the doctor's diagnosis, prognosis and recommendation that a furlough is granted.

We hope that the above agreement will meet with your approval.

Very sincerely yours,
Dorothy M. Calef
(Mrs.) Dorothy M. Calef
Director of Home Service

DMC:GG

"Oh Doctor"

**Thousands of physicians
give the same advice...**

"Use a POLORIS poultice"

Your patient will be grateful if you prescribe Poloris Dental Poultice for emergency dental pain—because Poloris is singularly effective in giving prompt, safe relief—usually without the need for systemic opiates or sedatives.

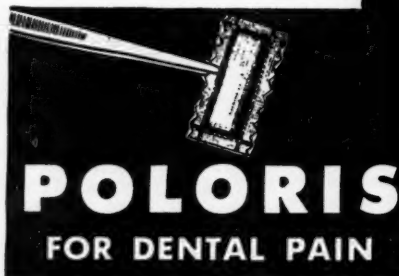
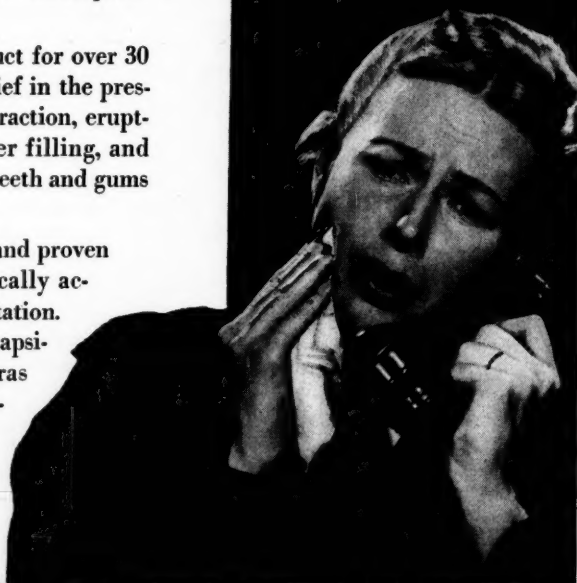
You can suggest Poloris with the full assurance that it will not interfere with subsequent dental treatment.

Poloris—a strictly ethical product for over 30 years—is indicated for pain relief in the presence of dental abscess, after extraction, erupting third molar, irritation after filling, and other painful conditions of the teeth and gums not due to cavity.

Poloris is a scientifically tested and proven dental aid...acts on the medically accepted principle of counter-irritation. Its active ingredients include capsi-cum, hops, benzocaine, sassafras root, and hydroxyquinoline sul-fate, in poultice form.

Obtainable at all drug stores.

*"Oh Doctor
in my
tooth-ach
and I can't
reach the
dentist"*



POLORIS CO., INC. 64M
12 High Street, Jersey City 6, N. J.

Please send free POLORIS samples to:

Name

Address

City State

HELPFUL HINTS IN NITROUS OXIDE-OXYGEN ADMINISTRATION FOR DENTAL SURGERY*

HARRY M. SELDIN, D.D.S., F.I.C.D., F.I.C.A.

The Author. *Harry M. Seldin, D.D.S., of New York City. Fellow, International College of Dentists; Fellow, International College of Anesthetists.*

A NEW era in tooth-pulling" was the exclamation made by Horace S. Wells when he regained consciousness after having his own tooth extracted under nitrous oxide-oxygen anesthesia on December 11, 1844, just 100 years ago to-day.

Wells was a practicing dentist in Hartford, Connecticut, a serious student, constantly on the alert for some means of combating the pain incident to the extraction of teeth. He attended a lecture and demonstration at Hartford given by Gardener Colton, a chemist, on the effects of nitrous oxide. Wells noticed that persons under the influence of "laughing gas" experienced no pain. He then asked to become a subject himself and requested to have one of his own teeth extracted while under the influence of the gas. Thus the dawn of modern anesthesia appeared on the horizon.

One hundred years have passed and we have made remarkable strides. Yet, have we gone far enough? Nitrous oxide-oxygen is still the general anesthetic of choice in oral surgery and yet 95% of the dental profession are not sufficiently qualified in the art of its administration.

Those who employ nitrous oxide-oxygen extensively, fully realize its many advantages when administered intelligently and efficiently. Yet, in spite of accepted facts, many members of the dental and medical profession continue to harp on the dangers and limitations of nitrous oxide-oxygen anesthesia and of its supposed contra-indications. To the anesthetist thoroughly trained in administration of nitrous oxide-oxygen for dental and oral surgery, there is only one contra-indication—"inexperience." Any anesthetic agent is only as safe as the qualifications of the anesthetist. After one hundred years, it still remains the safest and best general anesthetic for dental and oral surgery in the hands of those who have mastered it.

Though the dental anesthetist is not expected to be an internist, he should have an understanding of the heart and what he may expect of it, in order that he may anticipate trouble; know how to pre-

vent it and be able to cope with it, should it occur. Carrying the patient in deep narcosis for a prolonged period with any anesthetic agent may cause irreparable damage to the brain cells. Nitrous oxide produces anesthesia primarily by limiting the oxygen supply to the brain. There is consequently some mild form of oxygen deprivation or anoxemia present in all nitrous oxygen administration. The anesthetist should bear in mind the fact that the displacement of oxygen from the body, by the nitrous oxide, becomes more rapid during deep narcosis, and the resulting anoxemia can become dangerous by its depressant action on the gray matter.

Marked anoxemia depresses the vasomotor control of the cerebral vascular system. A stagnation of the blood in the brain is thus produced with the resulting accumulation of carbon dioxide and further reduction of oxygen to the brain cells. As the cordical cells are sensitive to oxygen want, they undergo structural changes which may result in irreparable damage to the brain cells. The respiratory and cardiac centers may be so depressed as to cause death.

The principle factor in gas oxygen anesthesia is to always keep the patient in light anesthesia, thus minimizing the oxygen want, so that no ill effect is produced upon the human body. Post anesthetic numbness of the fingers or feet, spasmodic contraction of extremities, clenching of thumb and fingers, persistent severe headache, or dizziness, severe crying spells, are symptoms of anoxic anoxemia. When these occur upon awakening from nitrous oxide-oxygen, the patient has been carried too deep.

In any nitrous oxide-oxygen administration, some disturbing and puzzling symptoms may become evident and it is imperative that the anesthetist should be able to interpret them and thus correct them. There is an old maxim in gas oxygen anesthesia that will always hold true "If in doubt as to any symptom, administer oxygen."

A pulse slower than normal signifies deep narcosis. Correction: Gradually increase the oxygen percentage.

Cyanosis, in the normal patient indicates deep narcosis. Correction: Several spurts of pure oxygen.

Ashy-gray color of skin always indicates deep narcosis. Correction: Administer pure oxygen.

continued on page 657

*An address delivered at the Dr. Horace Wells' Centennial Dinner, at Providence, December 11, 1944.

A TROUBLE-MAKER?



Yes, a loose, ill-fitting denture* often can be a trouble-maker. It can cause embarrassment, induce nervousness, and contribute to poor digestion as a result of insufficient mastication.

Dr. Wernet's Plate Powder sprinkled on dentures holds them securely and comfortably in place—cushions the shock of biting and chewing and thereby helps to restore confidence and the ability to masticate all types of food properly.

Made of costliest ingredient—so pure you eat it in ice cream—Dr. Wernet's Powder is pleasant tasting, harmless if swallowed, and safe to use regularly. Recom-

mended by dentists for over 30 years. A sample sent on request or available in regular sizes at all drug stores. For free sample, address: Wernet Dental Manufacturing Co., Dept. 164-M 190 Baldwin Ave., Jersey City 6, N. J.

**Loose, ill-fitting dentures are usually the result of changed bone and tissue formation. In severe cases the patient should, of course, see his dentist.*

DR. WERNET'S POWDER

Holds dentures firmly
and comfortably in place



NITROUS OXIDE-OXYGEN ADMINISTRATION FOR DENTAL SURGERY

continued from page 655

Frequent swallowing, retching, and a pale green color in the skin of the face are all warning symptoms of nausea and vomiting. Correction: Several breaths of oxygen.

Perspiration, with forehead warm, usually denotes excessive CO² and rebreathing. Correction: Reduce degree of rebreathing or concentration of CO².

Perspiration, with forehead cold, indicates deep narcosis and approach of shock. Correction: Administer pure oxygen.

Clonic spasms of body muscles may accompany deep anesthesia. Correction: Increase oxygen percentage.

Tetanic spasms of body muscles indicate deep narcosis. Correction: Administer several spurts of pure oxygen under pressure.

Purposeful muscular movements indicate that the patient is too light. Correction: Increase pressure and administer pure nitrous oxide.

Purposeless muscular movements indicate that the patient is too deep. Correction: Increase oxygen percentage.

Opisthotonos (bridging or arching) may be a sign of deep narcosis or of excitement. Compare with other symptoms. Correction: Administer one or two spurts of pure oxygen under pressure if deep, pure nitrous oxide if in the excitement stage.

If the pupils are large and react actively to light, and the lid reflex is present, the patient is too light. Correction: Reduce the oxygen percentage.

If the pupils are large and do not react actively to light and the lid reflex is absent, the patient is too deep. Correction: Increase oxygen percentage or force pure oxygen.

The manifestation of nystagmus (vertical or horizontal oscillation of the eye ball) takes place in the light phase of anesthesia. Correction: Reduce the oxygen percentage. Fixed eyeballs, staring, and the oxygen percentage. Fixed eyeballs, staring and without reflexes occur in deep narcosis. Correction: Administer pure oxygen under pressure.

Sighing is an index of good anesthesia when it occurs at infrequent intervals. Otherwise, it is evidence of oxygen want or a superabundance of carbon dioxide. Correction: Addition of oxygen or reduction of rebreathing.

Crowing occurs in deep narcosis as a result of spasm of the laryngeal muscles. Correction: Increase oxygen percentage, or give spurt of pure oxygen.

Prolonged inspirations mean light anesthesia. Correction: Decrease oxygen percentage.

Breath-holding, provided that the reflexes are active, may be taken to signify light anesthesia. Correction: Reduce oxygen percentage.

Prolonged jerky expirations, also known as stertorous breathing is a phenomenon of deep narcosis. Correction: Increase oxygen percentage.

Pause between breaths indicates that the patient is deep. Correction: Increase oxygen percentage.

Cessation of respiration, together with the abolition of all reflexes, represents extreme depression of the respiratory center in the medulla by anoxemia. Correction: Establish open airway; force pure oxygen under pressure; and apply resuscitative measures.

On this, the one hundredth anniversary of the discovery of nitrous-oxide as an anesthetic for dental surgery, let us all resolve to learn the art and science of anesthesia. The relief of pain in the dental chair should be one of our main objectives. Good dentistry and painless dentistry are synonymous, and both can be mastered.

REFERENCE

"Practical Anesthesia for Dental and Oral Surgery."
... Seldin "Lea and Febiger." 1942.

DIAMONDS

The gift of beauty—forever.

There is nothing that so typifies the spirit of giving as does the diamond. There is nothing that can continue so surely to maintain its beauty, its value, its sentiment.

ASK A CERTIFIED GEMOLOGIST

Tilden-Thurber

PROVIDENCE • WAYLAND SQUARE • NEWPORT

Therapy in Nutritive Failure

IN MANY, if not most disease states, the therapy of nutritive failure is important in hastening convalescence and restoring the patient to a state of health.

The four essentials for therapy in nutritive failure include . . .

1. **DIET:** 4,000 calories, 150 gram protein, rich in vitamins and minerals.
2. **BASIC THERAPY:** Thiamine; riboflavin, niacinamide, ascorbic acid, orally.
3. **ADDITIONAL MEDICATION:** Synthetic vitamins as indicated orally or parenterally.
4. **NATURAL B COMPLEX:** Brewers' Yeast or extract, or rice bran extract, and/or liver extract orally or parenterally.

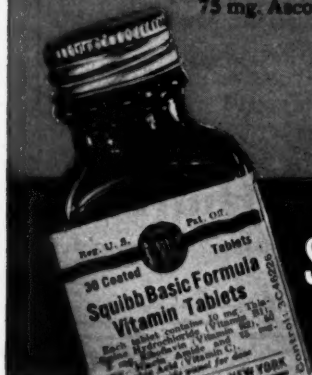
The Squibb Laboratories provide three of the four essentials for such therapy. They provide **BASIC FORMULA VITAMIN TABLETS** for intensive **BASIC THERAPY**—note their content:

10 mg. Thiamine Hydrochloride
50 mg. Niacinamide
5 mg. Riboflavin
75 mg. Ascorbic Acid

This is the basic formula used by Drs. N. Jolliffe and T. D. Spies and described by the latter in his paper on **Nutritional Rehabilitation** of 100 American workers for industry.

Squibb also provides the synthetic vitamins indicated for **additional medication** as well as the **natural B Complex factors**—the fourth essential therapy of nutritive failure.

Sold to druggists in bulk. . . . Prescribe as few or as many tablets as may be needed. . . . The cost per tablet is surprisingly low. . . . Write for literature.



Squibb Basic Formula Vitamin Tablets

HOSPITAL ASSOCIATION OF RHODE ISLAND

DENNETT L. RICHARDSON, M.D., *President*

FRANCIS C. HOUGHTON, *Secretary*

HARMON P. B. JORDAN, M.D., *Vice President*

WILLIAM SLEIGHT, *Treasurer*

ARTHUR H. RUGGLES, M.D., *Editor*

WAR-TIME VOLUNTEERS IN HOSPITALS

All voluntary hospitals have depended on the service of friends from their very beginning. We seldom remember that the Boards of Trustees and members of the Visiting Staffs give their time, without salary, and thereby constitute essential volunteer groups without which hospitals could not operate. During normal years, many people have been interested in aiding in the care of the sick but never to the extent that is now needed. There are many ways in which this may be done.

Male Attendants

Male attendants are just not obtainable. The young men are in service and industry has taken nearly all the others who are employable. However, business and professional men, who have the proper spirit, have come to the rescue. After a well organized course of instruction in the ways of hospitals and in the duties of male attendants, they work either morning or evening hours in operating rooms, male wards or the accident rooms. And they do it well.

The American Red Cross has recruited and trained four groups for service to civilian hospitals, viz; Nurses Aides, Gray Ladies, Dietitians Aides and the Motor Corps.

Nurses Aides

The need for these arises from the fact that the Armed Forces have taken so many graduate nurses that there are not enough to staff the hospitals. The number of student nurses has increased, stimulated somewhat by the formation of the Nurses' cadet Corps, but the number must be limited by the instructors and class-room space available. Part of the student nurses time must be allocated to the educational phase of her training so her service to patients must be definitely limited. The American Red Cross recruits candidates, employs a graduate nurse as instructor and uses the wards of the hospitals for the practical part of the training. The classes occupy 80 hours, and the Nurses Aides agree to work 150 hours a year.

Gray Ladies

The Gray Ladies are also organized by the Red Cross, having a training course. They have duties as follows:

Serve at Information Desk, or on the wards in secretarial capacity to the Head Nurse, upon request.

Take care of flowers.

Accompany patients to X-Ray or Operating Room.

Bring papers or magazines of interest to patients if they desire.

Do shopping for patients.

Act as messenger for Head Nurse.

Make drinks — force fluids — limit fluids.

Feed patients at meal times.

Write letters for patients, or read to them if desired.

Assist in discharging patients.

continued on next page

CHAPIN SEEKS PSYCHOPATHIC AID

The following appeal, received from Dr. William Hindle, superintendent of the Charles V. Chapin Hospital, warrants the attention of the Doctors of the state:

"Owing to the recent unlooked-for loss of a large share of the essential personnel of the psychopathic department of the Charles V. Chapin Hospital by recruitment to the armed services, the administration is making an appeal to the doctors of the state and city to help in the relief of a desperate situation. The administration is painfully aware of the need of hospitalization for the study of mental patients by temporary observation. It is, however, not fair, under the present circumstances, to admit to the wards patients beyond the ability of the personnel to care for them adequately. The standard level of service must be reckoned with.

"It is hoped, by lowering the intake of patients temporarily and by the institution of all available means to augment the manpower, our objective will be attained at an early date. A helping hand now will be greatly appreciated by the administration. Your cooperation and patience is fervently solicited in order to meet the present bad situation. After a brief respite, during which an adequate nursing personnel may be built up, the hospital will again admit the mentally sick to the full capacity of the institution."

Act as hostesses during visiting hours, conducting visitors to patients, etc.

Answer call light and summon Nurse or Nurses' Aide, if the service needed involves one of their duties.

Assist in making supplies and counting linens.

On holidays, such as Christmas, Halloween,

Fourth of July, etc., assist in decorating Ward if the Hospital so desires.

Dietitians Aides

The dietary Department must supply hot, palatable food at the bedside in many different locations remote from the point of preparation at approximately the same time. When to that is added the various limited and special diets which must be served besides the regular full diet, the magnitude of the problem created by diminished personnel is apparent. The Red Cross has helped this situation by training Dietitians Aides.

Motor Corps

The drivers of ambulances and beach-wagons have been trained and certified by the American Red Cross and they bring patients to clinics at hospitals and return them to their homes, particularly those who are elderly and younger people who find it difficult to get about.

There are other departments in the hospital in which volunteers have been found very useful.

Accounting Department

The problem of patients' bills alone constitutes a large volume of business particularly in view of the fact there are variable basic rates, with charges from various service departments which have to be sent to the Accounting Department and these bills may be paid by the patient in full or in part, by the Blue Cross, by the employer under the Workmen's Compensation Act, by insurance companies under health policies, or by the Directors of Public Welfare. This same department must keep an account of all bills for supplies and services furnished by outside agencies and must keep

an account of and pay all wages. Volunteers have helped here in the evening hours.

Blood Bank

The problem of taking blood, typing it and processing it can only be done by people who are technically trained for the job. However, volunteers are useful here in recording and issuing both blood and plasma on requisition.

Central Supply Room

Preparation of various kinds of sets for intravenous medication, spinal punctures, paracentesis sets of various sorts may well be made up by volunteers working under the supervision of graduate nurses.

Housekeeping Department

Issuing, repairing and laundering of the large amount of dry goods which hospitals use, cleaning of corridors and the running of elevators are duties which can be performed by volunteers who bring to the job knowledge of those techniques.

Information Desk

Reception of visitors and accurate maintenance of the register of the patients, the handling of mail and gifts for patients so that they get to the proper persons are the chief duties at the Information Desk. Volunteer help is indeed welcome here.

Laboratory

Most of the work done in the pathologic laboratory pre-supposes previous training as a necessary requisite for proper work. Some people who have been trained in these techniques and are not doing this kind of work now, have been able to volunteer a little time to this department and some groups have been trained to do some of the procedures which are not too involved.

Nursing School Office

The large amount of paper work necessary as part of the work of the Nursing School Office, both to record the educational progress of the

continued on page 687



Medical Secretaries . . .

- Edgewood Medical Secretaries are skilled in laboratory techniques, medical stenography and accounting.

Interested professional men should phone or write the College PLACEMENT OFFICE

Edgewood Junior College

founded 1924

198 Armington Street Edgewood 5, Rhode Island
MEMBER-AMERICAN ASSOCIATION OF JUNIOR COLLEGES

REPORT OF A CASE OF STAPHYLOCCUS BACTEREMIA TREATED WITH SULPHADIAZINE AND PENICILLIN

JOHN F. KENNEY, M.D.

The Author, John F. Kenney, M.D., F.A.C.P., Chief of the Medical Division and Director of Laboratory, The Memorial Hospital, Pawtucket, Rhode Island.

My reason for presenting this case is first to contrast present day treatment in these bacterial infections — that is, the results obtained — compared with those expected several years ago. Secondly, we note the fact that this patient's only sister died of a subacute bacteriological endocarditis four years ago. This we definitely found by autopsy.

The patient is a twenty year old white American female, admitted on June 23, 1944.

Family History: Father and mother living and well. 1 sister died of subacute bacterial endocarditis.

Past History: Always well except for an occasional cold. Had a fall in office where she works and was out of work several weeks with a so-called sacro-iliac.

Menstrual History of periods being delayed one month.

Present Illness: About three days before entrance, patient was treated for what her mother called the gripe. Given empirin and went to work. Taken home that day with temperature 104. Physician called who sent her, to hospital as she had become delirious and unmanageable at home. Required restraint on admission to hospital. Temperature on hospital admission 105.6.

Physical Examination: Well developed and nourished white female in bed. Back and neck rigid.

Eyes — pupils somewhat dilated. Impossible to do a satisfactory eyeground examination.

Teeth, mouth, throat and ears negative.

Chest — heart and lungs are negative.

Abdomen — soft. Liver and spleen not felt. No masses.

Reflexes difficult to evaluate as on touching the patient in any part of the body she would cry and scream and thrash around the bed.

Diagnosis of a meningeal infection made and a spinal puncture and blood culture obtained. Spinal fluid faintly cloudy. No organisms obtained on smear. Blood: 5,180,000 R.B.C., 8,800 W.B.C.,

Hgb. 14.3; Polys. 84%. Smear and culture from nose and throat negative. Urine: yellow, acid, 1.014; sugar negative, Albumin; sediment: 1 epi. cells; 1 leucocytes.

Patient placed on routine treatment with clyses and large doses of sulphadiazine. Temperature dropped to 103 in 48 hours and to 100.2 in the next 24 hours. The laboratory reported on culture both from spinal fluid and blood culture. A staphylococcus aureus hemolyticus. On the fourth day patient had a chill and temperature started to rise to 103.4. The sulfa level obtained on June 24th was 18.6; June 25th was 29; June 26th was 24; June 27th was 14; June 28th was 10.

Blood count on June 29, 1944:

R.B.C. 3,940,000; W.B.C. 16,400; polys. 88%

Blood count on July 3, 1944:

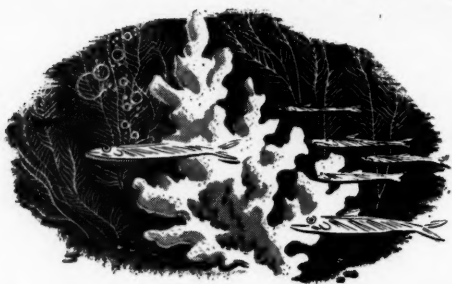
R.B.C. 4,100,000; W.B.C. 14,800.

Blood count on July 19, 1944:

R.B.C. 3,420,000; W.B.C. 15,100; polys. 75%.

On the fifth day with another chill and 103.4 temperature, penicillin started intravenously and followed by intramuscular injections until temperature became normal for one week. Following blood culture reports, source of infection presented a problem. Slight vaginal discharge and delayed period considered as slight bloody discharge started and continued vaginally for several days. Smears and A.Z. test proved negative. History finally obtained from mother that about ten days previous to entrance, patient had a slight infection on toe which four to five days of soaking in Lysol had cleared up. No evidence found on examination of this toe at present time. Repeated examinations of chest revealed nothing unusual until heart examined on the tenth day when a slight systolic murmur was heard at apex which sound subsequently increased each day and could be heard all over precordium. P 2 somewhat accentuated on the twelfth day of illness. Embolic phenomena were observed on several fingers of both hands and several toes and both heels. Cultures and smears obtained from these areas revealed staphylococcus aureus hemolyticus. The temperature became normal on July 13th, the 21st day of illness. Averaging between 99.4 to 102.5 and then remained normal until July 29th, the 37th day of illness. A total of 690 grains of sulphadiazine was

continued on page 665



50% Better Absorption

*Tests on an unselected group of patients have established that the gluconic acid salts of ferrous iron provides 50% better absorption than other ferrous compounds.

Moreover, Fergon (ferrous gluconate Stearns) is so free from irritation that it can be administered even on an empty stomach—the ideal condition for maximal utilization.

**Reznikoff, P., and Goebel, W. F.: The Use of Ferrous Gluconate in the Treatment of Hypochromic Anemia. J. Clin. Invest. 16:547, 1937.*

Fergon

STEARNS FERROUS GLUCONATE



Available as a palatable 5% elixir in 6-oz. and 16-oz. bottles, as well as in 2½-grain tablets in bottles of 100, and 5-grain tablets in bottles of 100, 500 and 1,000.
Trade Mark Fergon Reg. U. S. Pat. Office

Frederick **Stearns & Company**
Division

DETROIT, MICHIGAN

NEW YORK KANSAS CITY SAN FRANCISCO WINDSOR, ONTARIO SYDNEY, AUSTRALIA AUCKLAND, NEW ZEALAND

RUPTURE OF LUMBAR INTERVERTEBRAL DISKS*

CHARLES S. KUBIK, M.D.

The Author, Charles S. Kubik, M.D., of Boston. Associate Neurologist, Massachusetts General Hospital; Instructor in Neurology and Neuro-pathology, Harvard Medical School.

THE onset of symptoms in most cases is related to an injury, such as lifting, a wrench, or a fall on the buttocks. Repeated attacks are the rule. In the earlier attacks pain is likely to be limited to the lower back. Eventually sciatica develops and is the outstanding symptom in practically all cases that come to operation. Flattening of the lumbar spine, limitation of forward bending and limitation of straight-leg raising occur in nearly every case and list of the lumbar spine is only a little less common. Paresthesia is a frequent symptom. Neurological examination is often negative. The angle jerk is diminished or absent in 50% of the cases, usually with rupture of the 5th disk, though occasionally with rupture of the 4th disk. The knee jerk is rarely affected. In a fair number of cases there is sensory impairment. Distribution of pain, paresthesia and/or sensory impairment is of considerable localizing value, though not always dependable; the top and inner side of the foot and the big toe are commonly affected in rupture of the 4th disk and the outer side of the foot and the little toe in rupture of the 5th disk. Weakness of dorsiflexion of the foot occurs occasionally, as a rule the total protein of the spinal fluid is slightly or moderately elevated, not often above 85 mgs. per 100 cc., though in some cases, it is normal. Narrowing of the 4th lumbar intervertebral space, shown by X-ray, is suggestive but not diagnostic of ruptured disk. Narrowing of the 5th intervertebral space is of little significance because of the marked normal variations in its size. A normal intervertebral space does not rule out ruptured disk.

Myelography with lipiodol or pantopaque is used at the M.G.H. to confirm diagnosis and localization. The oil is removed through the lumbar puncture needle immediately after the examination. Simple diagnostic lumbar puncture is generally omitted.

*An Abstract of the presentation of the Subject at the Second Medical Colloquium conducted by the Department of Medical Sciences, Brown University, on October 20, 1944.

Operation should be reserved for those cases with intractable pain which does not respond to conservative measures and cases with frequently recurring pain. In the latter group, since recurrence is almost certain, time spent on conservative treatment is almost sure to be wasted.

CASE REPORT

continued from page 663

used in the first four days until penicillin was started and a total of 2,250,000 units of penicillin was used throughout the remainder of the illness until discontinued.

NOTE: Patient was last examined on October 3, 1944, feeling well and back at work. Still presents slight blowing systolic murmur. The possibility of a vegetation condition on the heart valves, a so-called subacute condition in remission, has to be kept in mind.

Bookkeeping Service**Assistance in preparing Income****Tax returns for physicians.****Bookkeeping systems.****RUTH B. SPRANGER****Telephone HOpkins 2597****Medical Secretary**

Immediately available. Fully qualified to handle all secretarial duties. Professional college training with special instruction in medical secretarial work. Direct inquiries through Executive Office, R. I. Medical Society, 106 Francis Street, Providence.

Paredrine-Sulfathiazole

How It Shortens
and Helps Avert

THESE drawings—from photographs presented as a scientific exhibit at the 1944 Meeting of the American Academy of Ophthalmology and Otolaryngology—demonstrate why Paredrine-Sulfathiazole Suspension is so strikingly effective in nasal and sinus infections. The choanae of patient T. D.—with subacute pansinusitis—are illustrated.

The dramatic success of Paredrine-Sulfathiazole Suspension in aborting colds and averting complications is largely due to its prolonged bacteriostatic action. When the Suspension is administered on retiring, for example, sulfathiazole can often be observed on infected mucosa the next morning—conclusive evidence that bacteriostasis has persisted all night long.

The fundamental reason for this prolonged bacteriostatic action is the fact that Paredrine-Sulfathiazole Suspension—not a solution, but a *suspension* of free sulfathiazole—covers the nasal mucosa with a fine, even frosting of sulfathiazole, which does not quickly wash away. Yet the Suspension does not cake or clump, and does not interfere with normal ciliary action.

SMITH, KLINE & FRENCH LABORATORIES
VASOCONSTRICTOR-SULFONAMIDE

INDUSTRIAL HEALTH

COMMITTEE ON INDUSTRIAL HEALTH

Charles L. Farrell, M.D., *Chairman*; Stanley Davies, M.D.; Arthur E. Martin, M.D., Elihu S. Wing, M.D., William P. Buffum, M.D.

THE seventh Annual Congress of Industrial Health will be held at the Drake Hotel in Chicago on February 13th, 14th and 15th, 1945. Blocks of rooms are being set aside for attendance at this meeting by the Drake, Knickerbocker and Maryland Hotels and the Medinah Club. All physicians interested in industrial health should, if possible, make the trip to Chicago for this meeting. This is the A. M. A. Council on Industrial Health meeting. Make reservations early! The program will feature recent advances in Industrial Medicine, Surgery and Hygiene, Rehabilitation in Workmen's Compensation, and late developments in plant Medical Department Services and Industrial Medical Service plans.

The Teaching of Industrial Health in Medical Schools

It is interesting to note that a survey of the sixty-six medical schools in 1943 reveals that more time is being devoted to this subject. The average number of hours of required lectures has increased 92% from slightly more than five in 1939 to nine and six tenths hours in 1943. Twelve medical schools which did not include Industrial Health in the curriculum in 1939 did so in 1943.

Five schools have designated Industrial Health Departments while in the remainder, with a few exceptions, the subject is taught by the Public Health, Preventive Medicine or a comparable department.

The time is not far distant when medical schools will make a very definite part of their course, instruction in Industrial Health with field trips to clinics, field trips to industry and participation in Industrial Health clinics.

The Duties of Physicians in Industry

The Council on Industrial Health, American Medical Association, has definitely outlined the purpose and scope of Medicine in Industry. In general they are

1. Prevention of disease or injury in industry by establishing proper medical supervision over industrial materials, processes, environments and workers.
2. Health conservation of workers through physical supervision and education.
3. Medical and surgical care to restore health

and earning capacity as promptly as possible following industrial accident or disease.

An industrial physician is one who serves employed individuals or groups on authorization of a third party having a valid interest.

The specific duties of a physician in industry are

1. Prevention. He should recommend appropriate protection of employees from conditions actually or potentially harmful.
2. Industrial Physical Examinations. Physical examinations for pre-placement of employed individuals and subsequent physical examinations to provide positive health protection for workers.
3. Health Education. Instruction of the workman in hygienic living both in and out of industrial environment.
4. Medical and Surgical Care (a) The treatment of compensable injuries and diseases, that is, those injuries and diseases which are directly related to the occupation. (b) The treatment of noncompensable injuries and diseases.—The treatment of injuries and diseases not industrially induced is the function of *private medical practice*. The physician in his industrial relationship should abstain from such services except in the case of:
 - (a) Minor ailments where the physician may treat a minor disorder which temporarily interferes with an employee's comfort or ability to complete a shift, and for the relief of which he may need immediate attention.
 - (b) First aid for urgent sickness. The physician should employ such measures as emergency dictates in case of urgent sickness occurring during working hours on the premises until such time as prompt notification of the family physician relieves him of further responsibilities.
 - (c) Rehabilitation after sickness and injury. The physician in industry can properly assume responsibility for those phases of rehabilitation after disability, industrially induced or otherwise, which progress best under controlled working conditions.

continued on page 685



"It's an ill wind that blows no good," the old proverb declares.

And the genius of medical men is giving new meaning to these old words.

For in the ill wind, the shattering, terrible wind of war, they are finding new facts . . . developing new skills . . . improvising new techniques . . . reaping new knowledge that will play a vast, important part in the building of that "better world to come."

**COSTLIER
TOBACCOS**

Camel

(This salute is published by the makers of Camel, the cigarette that is proud to be a favorite with men who wear the caduceus, as well as men in all the other services—according to actual sales records.)



ROLL CALL IN THE STATES

(The Editors of the Journal take this opportunity to express to all our Doctors serving with the armed forces our thanks and appreciation for their thoughtfulness in keeping us posted regarding their activities. The interest manifested by all our members, at home and abroad, in the assignments of the men with the Army, the Navy and the Air Forces has been widespread. To all of the Doctors At War we extend our sincere greetings and our heartfelt hopes that another Christmas time will find them all returned to their families, and to Rhode Island.)

AFTER a tour of service in the Pacific as a Naval flight surgeon during which time he was promoted to the rank of Lieutenant, Senior Grade, Dr. John R. Cranor, Jr., of Howard, is now on duty at the U. S. Naval Air Facility at Sanford, Maine . . . Captain Edward J. Sydlowski continues on duty at the Army and Navy General Hospital at Hot Springs National Park, Arkansas, where he has assignments as chief of the department of anesthesia and of the operating room section, director of blood, fluid and oxygen therapy, and also the post of director of the school of anesthesia for student nurse anesthetists. . . . Captain David Fish, formerly of Howard, is engaged in psychiatric rehabilitation of returning neuro-psychiatric battle casualties at the Lovell General and Convalescent hospital at Fort Devens. . . . From the Lone Star State Major Frank J. Jacobson reports that he is now stationed with the Regional Hospital at Camp Berkeley where he is chief of Control and Clinic Section, Out-patient Service, a co-ordinating department for all clinics for treatment, disposition and hospital admissions. Taking time from his extremely busy assignment Dr. Jacobson writes that he "enjoys reading the MEDICAL JOURNAL for it keeps me in contact with things civilian in medicine in Providence and Rhode Island" . . . Lt. Comdr. Orland F. Smith, of Pawtucket, after temporary duty at Corona, California, has been re-assigned to the Newport Naval Hospital where

he is a member of the surgical staff, "operating every day on all types of patients, traumatic and elective, acute and chronic." . . . Ass't Surgeon, Harold S. Barrett, of the USPHS, has been transferred from Yazoo City to Clinton, Tennessee. At Yazoo City he was in charge of a health department covering the area between Camp Shelby and MOP at Flora. After special training at Washington, D. C., Dr. Barrett has been assigned to his present vital defense area where he reports that his work is "similar to the so-called extra-cantonment areas covered by medical officers during the last war. . . . water and milk sanitation, housing, pediatrics, and venereal disease control mostly." . . . Lieut. Herman B. Marks, of Central Falls, is now on duty as a flight surgeon at the Naval Air Station at Jacksonville, Florida . . . Lt. Comdr. Amedeo Mastrobuono, of Lafayette, engaged in neuro-psychiatric work dealing with acute psychoneurotics and also with patients who have been under considerable combat, is at the Naval Hospital at Chelsea, Mass. . . . Major J. A. Dailey, of Cranston, is now stationed at Fort Devens after a tour of duty at the Cushing General Hospital in Framingham . . . Captain Isadore Gershman, of Providence, reports from Camp Stewart, Georgia, that "the receipt of the MEDICAL JOURNAL is greatly appreciated . . . the interesting point, however, is that several colleagues including Dental Officers and Medical Administrative Officers have expressed their desire to read the issues of the JOURNAL regularly because of its quality." Captain Gershman is a battalion surgeon with a detachment that provides general medical service for the anti-aircraft battalion to which it is assigned. . . . Lieut. Rudolph Pearson, of Edgewood, has completed twenty one months of intensive work at the Newport Naval Station where he is head of the ear, nose and throat clinic where approximately

continued on page 673

... Where you are always welcomed ...

Come over today ... Easy to reach

Plenty of parking space



Serving the profession is our business

Let us serve YOU

Anesthetic Gases
Physicians-Surgeons
Medical and Hospital
Supplies

624 Broad Street

**SMITH-HOLDEN
COMPANY**

Across from St. Joseph's Hospital

Hospital Beds-Wheel
Chairs-Trusses-Belts
Supports-Sick Room
Supplies

PROVIDENCE

DOCTORS AT WAR

continued from page 671

fifteen hundred cases monthly are treated and daily operations are routine . . . At the Naval Air Center, Hampton Roads, Virginia, *Comdr. Edwin Vieira*, of East Providence, continues as flight surgeon, doing much N-P work associated with aviation officer and enlisted personnel. . . . *Major Bernard Q. Wise*, formerly of the State Hospital at Howard, is stationed at Valley Forge General Hospital in Phoenixville, Pa. . . . *Major Rawser P. Crank*, of Cranston, is presently chief of laboratory service at the Station Hospital, Camp Hood, Texas. Previously he was chief of Reconditioning Service and assistant camp surgeon at the station hospital at North Camp Hood and in this capacity was also commanding officer of that hospital . . . Also continuing on duty in Texas is *Captain N. S. Rakatansky* who is chief of anesthesiology and Operations Branch, and Chief of the Central Supply at 3,000-bed McCloskey General Hospital at Temple. . . . *Lt. Comdr. Walter F. Fitzpatrick* left Newport Naval Hospital on December 1 for his new assignment with Special Augmented Hospital No. 3 at Shoemaker, California. . . . *Lieut. Robert W. Riemer*, of Rumford, has completed his indoctrination courses at Carlisle Barracks and has been assigned to Fort Riley, Kansas. . . . *Lt. Comdr. Joseph A. Baute*, of East Greenwich, has reached Pittsburgh after tours of duty at Philadelphia and Buffalo. At the Smoky City, Dr. Baute has the task of doing the neuropsychiatric examinations on all Navy recruits, and in addition is doing quite a lot of general work in Pittsburgh and in Erie. . . . *Captain Philip S. Geller*, of Newport, serving as chief of the section on septic surgery and on gynecology at Dibble General Hospital in Menlo Park, California, has recently acquired the additional duties as assistant chief of the plastic surgery section with the re-organization of the hospital as a specialized center for plastic surgery, blind and ophthalmic surgery. . . . The dual task of seeing that landing craft ships are provided with "balanced" crews and also of aiding men returned from combat to condition themselves for further action is the assignment of *Lt. Comdr. Harold W. Williams*, of Providence, now stationed as a member of the board of medical examiners at the Amphibious Training Base at Little Creek, Virginia. . . . *Major G. E. Menzies*, of Wickford, is Base Surgeon and Commanding Officer of the Station Hospital at Seymour Johnson Field in North Carolina.

NECROLOGY

P. HARTLEY RUSHTON, M.D.

Died November 18, 1944

The Health Advantages of

HOMOGENIZED MILK

uphold the confidence of your
patients in your advice.

A. B. Munroe Dairy

When diets call for the wholesome
nourishment and uniform cream
content of *homogenized milk* sug-
gest A. B. Munroe Dairy. Strictly
sanitary production and close lab-
oratory control result in a product
that backs up your good judgment.

Two Types

*A. B. Munroe Dairy Regular
Homogenized Milk

*Grade A Homogenized Milk

A. B. Munroe Dairy

Est. 1881

102 Summit Street

East Providence, R. I.

Tel: East Providence 2091

WHEN BETTER IS AVAILABLE.. DEMAND IT!



The Ticonium cast base fits with a degree of accuracy that cannot be approximated by the plastics or by swaged or cast bases of other metals. In a Ticonium cast base the fine details of your impression are carefully preserved. A Ticonium cast base is uniformly thin. The burnished palatal surface of a Ticonium cast base assists the retention of a denture.

"YOU GET MORE WITH TICONIUM"

ONLY



CAST BASES POSSESS THESE ADVANTAGES

DECIDEDLY
MORE
ACCURATE

- BEAUTIFUL
- LIGHT
- THIN
- STRONG
- RIGID
- CLEAN
- COMPATIBLE
- COMFORTABLE
- PERMANENT IN FORM
- DISTINCTIVE



INSTANTLY RESPONSIVE TO THERMAL CHANGES

★ TICONIUM ★

413 North Pearl Street, Albany, N. Y.

THERE IS A TICONIUM LABORATORY NEAR YOU

RHODE ISLAND STATE DENTAL SOCIETY

ARTHUR M. DRING, D.M.D., *President*

EARL B. KEIGHLEY, D.M.D., *President-Elect*

WILLIAM S. GEE, D.M.D., *Vice President*

CHARLES F. MCKIVERGAN, D.M.D., *Secretary*

JAMES C. KRASNOFF, D.M.D., *Treasurer*

HAROLD F. DOYLE, D.M.D., *Librarian-Curator*

NORMAN H. FORTIER, D.M.D., *Editor*

A D A ANNUAL MEETING

Dr. Archie A. Albert and your Editor, as delegates from Rhode Island, attended the annual meeting of the House of Delegates of the American Dental Association held in Chicago the week of October 15. In spite of difficulties resulting from war conditions the meeting paralleled the excellent ones of the past, and naturally much discussion was devoted to post-war planning for dentistry.

Two notable resolutions adopted by the Association are of particular interest to the problem of aiding the dentists returning to civilian practice after service with the armed forces. One resolution recommended the formation of a joint Army and Navy Dental Surplus Board which will have records of surplus supplies and equipment to be returned to civilian use, and will also have the opportunity to examine and control the sale and the priority of distribution of these supplies. The priority table would be established as follows:

- A. Discharged officers electing to receive equipment instead of bonus.
- B. Schools (professional).
- C. Hospitals, medical centers, health agencies.
- D. Red Cross.
- E. Lend-lease and UNRRA.
- F. Foreign health service.
- G. Foreign schools (professional).

The second resolution was that the American Dental Association, in order to assist returning dentists, even though certain benefits are available through the Servicemen's Act of 1944 (the so-called G. I. Bill of Rights) feels that when officers may not be able to obtain the benefits of the G. I. bill because of circumstances beyond their control, the ADA should be prepared to advance loans, and therefore it anticipates the establishing of a special fund of \$100,000 to be used for loans to dental officers. Each such case will be investigated and endorsed by state and local component societies of the ADA. The loan fund will be in existence for five years.

The meetings of the session were presided over by Captain C. Raymond Wells, DC, USN. President of the Association this year is Dr. W. H. Scherer of Texas, while Dr. Sterling V. Mead of Washington won the vote for the post of president-elect. Other officers named were: Drs. H. E. King, W. I. McNeil and E. M. Clifford, vice presidents; Dr. Harold S. Pinney, secretary; Dr. R. H. Volland, treasurer, and Dr. Harold Hillenbrand, editor.

Your Editor was honored with appointment to the standing Membership Committee of the ADA to serve until 1949.

RHODE ISLAND'S 1945 MEETING

Preliminary announcement is made by Dr. George J. Racicot of plans for the Annual Meeting of the Rhode Island State Dental Society to be held at the Narragansett Hotel in Providence on Tuesday, January 23, and Wednesday, January 24, 1945. The meeting, as the only wintertime session in New England, promises to be one of the finest ever planned for the Society.

The tentative program as announced at this time by the Committee on Arrangements lists the following outstanding presentations:

"Exodontia and Minor Oral Surgery", by Dr. Wells Daniels of Springfield, Mass.

"Extraction in Orthodontic Treatment", by Dr. Samuel Fine of Fitchburg, Mass.

"Infection of the Mouth and Structures of the Neck", by Dr. James Maycock of Worcester, Mass.

"The Principles Underlying the Treatment of Periodontal Disease", by Dr. Irving Glickman of Boston, Mass.

"Gold Inlays, Cavity Preparation and Development of Wax Patterns", by Dr. Robert Loneragan of New London, Conn.

"Will You Fly?" (with sound pictures), by Mr. Robert Lybeck of Boston, Mass.



... may I suggest you
buy more
U. S. War Bonds today?

J. S. Harper



it's always a pleasure
I.W. HARPER
the gold medal whiskey *since 1872*



Distilled in peace time and Bottled in Bond
under the supervision of the U. S. Government.

Kentucky Straight Bourbon Whiskey, Bottled in Bond, 100 Proof, Bernheim Distilling Co., Inc., Louisville, Kentucky.

DISTRICT SOCIETY MEETINGS

THE WASHINGTON COUNTY MEDICAL SOCIETY

The regular meeting of the Washington County Medical Society was held in Westerly on October 11th.

Dr. B. Earl Clarke, Dr. Alex M. Burgess and Dr. Hoeltzel of Providence were guests. Dr. Clarke gave a very interesting lecture on Skin Cancer with excellent lantern slides.

After the meeting dinner was served.

J. R. TATUM, M.D., *Secretary*

PROVIDENCE MEDICAL ASSOCIATION

A regular meeting of the Providence Medical Association was held at the Medical Library on Monday, November 6, 1944. The meeting was called to order by Dr. Jackvony at 8:45 P. M.

The President announced that since the minutes of the previous meeting had been published in the Journal of the Rhode Island Medical Society they would not be read unless any member desired to have a correction inserted.

In the absence of the Secretary, the Executive Secretary made the following report for the Executive Committee:

"At its latest meeting the following actions were among those taken by the Executive Committee:

It was moved that the Treasurer be authorized to purchase for the Association a War Bond of a thousand dollar maturity value during the Sixth War Loan Campaign.

It was moved that the Association cooperate in so far as is advisable in the promotion with other organizations of the State of a statewide educational meeting on the subject of Administration Law.

It was moved that the appointment of the executive secretary be approved for service as a member of a three-member advisory board to the office of Price Administration to consider the problem of supplemental gasoline rations for registered pharmacists and medical college trained technicians engaged in detailing medical products to the professions. The other members of the proposed board would be the President of the R. I. College of Pharmacy and the President of the R. I. Pharmaceutical Association.

It was moved that the date of the Annual Meeting of the Association be Monday, January

8, rather than the first Monday of the month which is January 1."

The Executive Secretary reported that the Executive Committee recommended for election to active membership Dr. Robert W. Riemer of Rumford, Rhode Island who is now serving as a First Lieutenant with the United States Army Medical Corps. Dr. William M. Muncy moved the unanimous election of Dr. Riemer. The motion was seconded and passed.

The President announced the appointment of the following Committees to prepare obituary tributes to deceased members:

Drs. Halsey De Wolf and Joseph C. O'Connell as the Committee to prepare the tribute to the late Dr. George Matteson.

Dr. Charles O. Cooke and Dr. John B. Ferguson to prepare the tribute to the late Dr. Albert A. Barrows.

Dr. John Donley and Dr. James Hamilton to prepare the tribute to the late Dr. Jerome J. McCaffrey.

Dr. Robert H. Whitmarsh and Dr. William M. Muncy to prepare the tribute to the late Dr. Robert S. Phillips.

The President introduced as the speaker of the evening Dr. William A. Horan, Medical Director, Division of Crippled Children, State Department of Health who spoke to the topic "Analysis of 40 Cases Operated Upon for Rupture of Intervertebral Disc in the Lumbar Spine." He cited the work of the late Drs. Danforth and Wilson where they showed that sciatica was caused by pressure on the nerves at the apertures where they merged. He spoke of the early work of Mixter where it was shown that lipiodol could demonstrate the association between these nerves and ruptured discs.

Then with a series of slides he showed the anatomy of the lumbar region where most ruptured discs occur. He mentioned the value of some antecedent history of accident in cases where discs are suspected. He stressed the value in detail of an examination and mentioned that, of course, various other matters such as cancer, tuberculosis could cause these symptoms and would have to be ruled out.

The triad which he considered of great importance consisted of an absent Achilles jerk, diminished sensation in the area of innervation, and

continued on page 679

SHRINKAGE IN MINUTES



1:52 P. M. Inferior and middle turbinates are highly engorged and in contact with the septum. The airway is completely blocked.

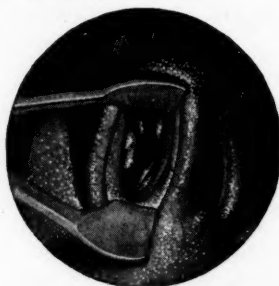


2:01 P. M. Maximum shrinkage has been obtained 9 minutes after two inhalations from Benzedrine Inhaler. The airway is open.

LASTING FOR HOURS



3:15 P. M. Airway is still open. Benzedrine Inhaler produces a shrinkage equal to, or greater than, that of ephedrine.



4:00 P. M. Two hours after treatment, shrinkage persists. Benzedrine Inhaler shrinkage lasts 17% longer than that of ephedrine.

A better means of nasal medication

In reporting their carefully controlled investigation of vasoconstrictive drugs, Butler and Ivy state that inhalers and sprays are preferable to nasal drops, and are—in most cases—"the better means of nasal medication."

Arch. Otolaryng., 39:109-123, 1944.

Each Benzedrine Inhaler is packed with racemic amphetamine, S.K.F., 200 mg.; oil of lavender, 60 mg.; and menthol 10 mg.



Smith, Kline & French Laboratories, Philadelphia, Pa.

Benzedrine Inhaler

Rapid, Complete and Prolonged Shrinkage

pain on straight leg raising. Sixty percent of ruptured discs could be recognized in this manner. Confirming evidence, of course, came from the use of lipiodol in the earlier series of cases and now the use of air. If the diagnosis was positive then operation was indicated.

At operation he said that the protrusion of the disc was usually easily found and when the dome over this was cut the disc would usually pop out being up to $1\frac{1}{4}$ inches in extent. He advocated fusion of the spine with chips from opposite leg. He then kept the patients three weeks on their backs and used the spinal brace for five weeks. He reported 40 cases of his own, 65% of these involved the fourth and fifth lumbar vertebra and he felt that he had good results in 91%.

The paper was discussed first by Dr. Herbert E. Harris who said that at the Rhode Island Hospital four men saw each case — a neurological surgeon, orthopedic surgeon, neurologist, and an x-ray man. As the disc was removed through a very small defect they don't fuse cases. He felt that the important part was diagnosis and that the operation was not difficult and that if orthopedic defects were

found in the patient they hesitate to operate until the outcome could be further studied.

The next man to discuss the cases was Dr. Wilfred Pickles who has done these cases at the Rhode Island Hospital. He also felt that the diagnosis was difficult and discussed the details of this. His cases got up usually on the twelfth day.

Dr. William A. Butler discussed the X-ray diagnosis and Dr. Ernest A. Burrows spoke of the neurological aspects. Following this Dr. Louis Goodman reported a case in which transverse myelitis had occurred following the rupture of the nucleus pulposus where there was great relaxation of the posterior ligament.

Attendance 55.

Collation was served.

FRANK W. DIMMITT, M.D.
Secretary

INCOME TAX

The deadline for payment of the fourth installment of estimated income tax for 1944 has been postponed from December 15 to January 15.

Amended 1944 declarations may be filed on or before January 15.

See page 691 for allowable income tax deductions prepared by executive office of Society.

E. P. ANTHONY, INC.

Druggists

178 ANGELL STREET
PROVIDENCE, R. I.

Paul C. Broderick

PRESCRIPTION SPECIALISTS

Established 23 years

506 ELMWOOD AVENUE, PROVIDENCE
Williams 9661

OXYGEN

CARBON DIOXID-OXYGEN
MIXTURES

HELIUM-OXYGEN MIXTURES

NITROUS OXID

CARBON DIOXID

CYCLOPROPANE

* * *

OXYGEN TENTS, FACE MASKS

For Sale or For Rent

CORP BROTHERS

Dexter 8020

24 Hour Service

From Petri Dish to Giant Tank



THAT, in brief, is the drama of the mushrooming growth of penicillin production. The House of Squibb, as you would expect, has played a major part in this triumph of modern science.

When Dr. Florey came to this country in 1941 to enlist American aid in the mass production of penicillin, the Squibb Laboratories had already been engaged in penicillin research for nearly a year. In January, 1942, Penicillin Squibb was one of three brands made available to the Office of Scientific Research and Development.

Although, three years ago, penicillin production was a matter of culture plates, laboratory flasks and tens of units, today Penicillin Squibb is cultured in giant tanks holding thousands of gallons of solution and producing billions of units of penicillin at one "harvest." Thus E. R. Squibb & Sons are today one of

the world's largest producers of penicillin. To this production Squibb has brought the accumulated knowledge and experience of 86 years as manufacturing chemists to the medical profession, plus the fruits of more than a quarter-century devoted to research and manufacture of biologicals. Today's great production of Penicillin Squibb is simply a continuation of the old Squibb ideal of translating experimental research into practical reality.

With such a background Penicillin Squibb is naturally a product as pure, uniform and reaction-free as contemporary science can produce. You will find in Penicillin Squibb the same high standards of purity, potency and dependability which have characterized Squibb products since 1858. When penicillin is finally released for unrestricted sale, be sure you get . . .

Penicillin Sodium Squibb

E. R. SQUIBB & SONS, NEW YORK

Manufacturing Chemists to the Medical Profession since 1858

COMMITTEE ON UNIVERSITY, HOSPITAL and MEDICAL SOCIETY RELATIONS

IN an effort to gain some insight into the plans for the post-graduate education and training of Rhode Island doctors serving with the armed forces the Committee on University, Hospital and Medical Society Relations has addressed the following letters and questionnaire to these men:
TO THE RHODE ISLAND DOCTOR SERVING WITH THE ARMED FORCES OF THE U. S.:

By action of the House of Delegates of the Rhode Island Medical Society a Committee on University, Hospital and Medical Society Relations has been formed to plan programs of post-graduate medical education for all the doctors of the State. Complete information on the work of the Committee will be published from time to time in the Medical Journal.

While our purpose primarily is aimed at raising the hospital service of the State by means of a wider utilization of the educational facilities of our colleges, as well as through the medium of a teaching faculty of the State Medical Society, yet we are also hopeful that the plan may crystallize into an excellent form of postgraduate education for every physician.

Our colleagues serving with the armed forces command our attention. You alone know what you will wish as regards educational facilities upon your return to Rhode Island. With no medical college within the State, and with your individual private practice certain to require the bulk of your time, we are hopeful that our program may supply your needs right here at home during your available time. Brown University has already taken the first step towards post graduate medical education with the creation of a Department of Medical Sciences whose personnel and facilities will be directed towards the assistance of medical education in our community.

With that thought in mind we address this letter to you with the request that you answer the following inquiries in so far as possible and also give us a frank opinion of just what you want as regards civilian educational training and how we may best provide it for you.

With sincere personal regards from your Society, we are,

The Committee on University, Hospital,
and Medical Society Relations

ALEX M. BURGESS, M.D., *Chairman*

B. EARL CLARKE, M.D.

HARMON P. B. JORDAN, M.D.

CONFIDENTIAL

TO THE COMMITTEE ON UNIVERSITY, HOSPITAL AND
MEDICAL SOCIETY RELATIONS OF THE
RHODE ISLAND MEDICAL SOCIETY:

1. I do ☐ plan to remain in Government service at the termination of the war.
2. I shall ☐ not desire additional training for civilian practice upon my discharge from military service.
3. I will desire (check which)

A refresher course of _____ months,
with special training in _____

(list hospitals in order of preference)

An internship . . . for _____ months at _____

A residency . . . for _____ months at _____

A salaried house officer position for _____
months at _____

(A.) Field in which special training is desired _____

(B.) I would ☐ not desire to take such training outside R. I.

4. I plan to engage in private practice in _____

(name of community)

(A.) I would ☐ be interested in becoming associated in private practice with a group of doctors.

5. Other comments. (Use reverse side of this page)

(complete signature of doctor answering inquiry)

PROMPT RELIEF OF ITCHING AND IRRITATION

**A SOOTHING
GREASELESS CREAM**

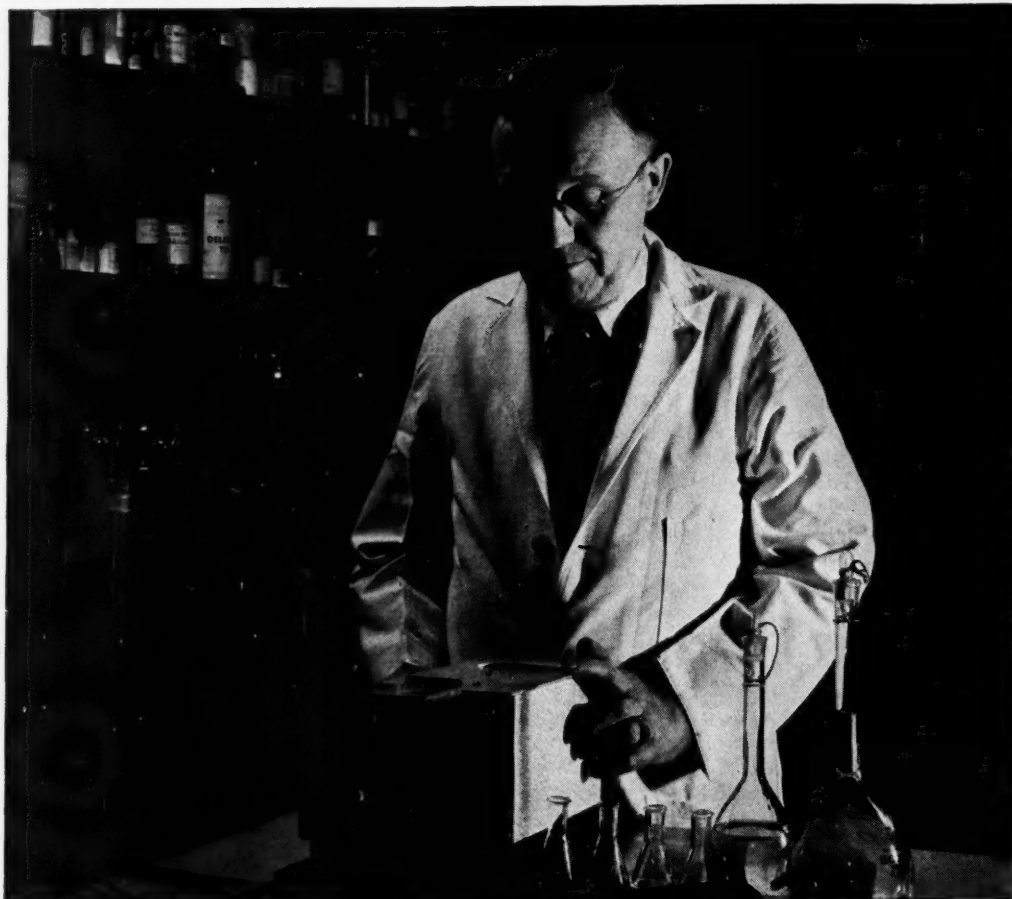
ENZO-CAL

Reg. U. S. Pat. Off.

(BENZOCAINE, CALAMINE & ZINC OXIDE)

**SAMPLE AND LITER-
ATURE ON REQUEST**

J. H. L. LABORATORIES, INC., 205 E. 42ND ST., NEW YORK 17



WHAT ARE WE LOOKING FOR?



In research on the sulfa drugs we are investigating the long list of possible chemical analogues of sulfanilamide . . . seeking compounds of greater effectiveness and less toxicity. But our studies go far deeper than that . . . we are inquiring into the interference of various substances with the action of sulfonamide drugs, for through a knowledge of the mechanics of these inhibitory agents we hope, in turn, to learn more about the action of the sulfas, and thus throw new light on this important field of chemotherapy.

PARKE, DAVIS & COMPANY  DETROIT 32, MICHIGAN

DUTIES OF PHYSICIANS IN INDUSTRY

continued from page 669

Nothing in the above outline can possibly be construed at any time to involve the general care of patients with chronic or non-compensable or non-occupational diseases other than the emergency and temporary care previously described. Physicians who assume the care of patients outside this category are not conforming the best standards of industrial health and are undermining the efforts of this committee and the Society of Industrial Physicians and Surgeons to standardize Industrial Medical practice.

Nurses in industry should be governed by a definite procedure as outlined by the American Medical Association. "Standing Orders for Nurses in Industry" has been published by the American Medical Association and the American Association of Industrial Nurses. In addition, the Liberty Mutual Insurance Company has published a booklet describing "Standing Orders for Nurses in Industry" as well as for "First-Aiders in Industry" with appropriate spaces for comments and changes by the attending physician.

Physicians who are merely "on call" at plants would do well to see that the nurses or first-aiders at the plants that they are associated with are supplied with copies of these publications. If they cannot obtain them, write directly to the chairman of this committee, c/o the Rhode Island Medical Society. For the nurse without medical supervision in her plant, we will also be very happy to cooperate in sending such literature to her upon request.

Several instances have been brought to this committee's attention wherein a nurse in a plant has offered to continue treatment for pernicious anemia and to do other procedures not properly related to Industrial Medical practice.

The Committee on Industrial Health intends to offer merely constructive criticism and in substance to state that if all nurses in industry would affiliate themselves with the Rhode Island Industrial Nurses Club and if all physicians, associated even remotely with industry, would join or participate in the activities of the Rhode Island Society of Industrial Physicians and Surgeons, the work of this committee would be considerably simplified in its efforts to educate the professions of Nursing and Medicine to what constitutes a basic Industrial Medical and Nursing practice.

Only by the constant meeting and interchange of ideas among doctors and nurses interested in the same field, can any workable mutually agreeable basis be established.

Time has put most of these
clocks out of running



Watchmaker in 1820

But time has added to
Johnnie Walker's popularity

Johnnie Walker still sets the pace among fine scotch whiskies. You get an extra margin of mellowness backed up by a flavour that's in a class by itself.



Popular Johnnie Walker can't be everywhere all the time these days. If occasionally he is "out" when you call... call again.

BORN 1820
Still going strong

**JOHNNIE
WALKER**



**BLENDED
SCOTCH WHISKY**

RED LABEL

BLACK LABEL

Both 86.8 Proof

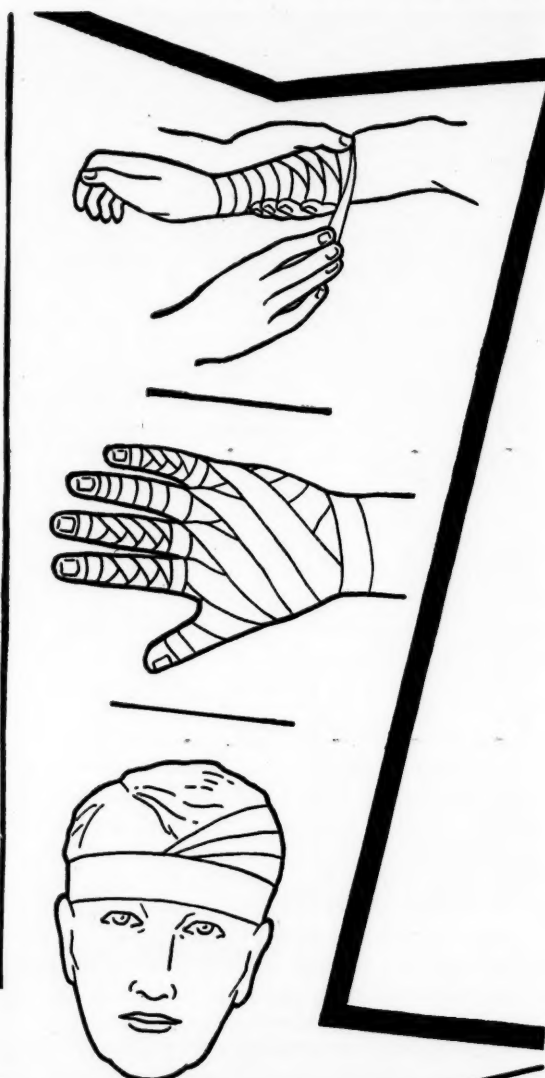
Canada Dry Ginger Ale, Inc.
New York, N. Y.

Sole Importer

**BUY UNITED STATES
WAR BONDS AND STAMPS**

NUPERCAINAL**equals***PHYSIOLOGICAL REST***equals***UNDISTURBED HEALING**

NUPERCAINAL is successfully used in traumatic as well as in surgical wounds. It prevents excessive evaporation of tissue fluid, provides prolonged anesthesia thus furnishing relief from pain and itching. Gauze does not adhere to the surface or edges of wounds. Painful dressings are eliminated.



One-ounce tubes
One-pound jars

*Trade Mark Reg. U. S. Pat. Off.
 Word "Nupercainal" identifies the product as containing "Nupercaine" (alpha-butyloxycinchonic acid-gamma-diethylethylenediamide) in lanolin and petrolatum, an ointment of Ciba's manufacture.



C I B A *Pharmaceutical Products, Inc.*
 SUMMIT, NEW JERSEY

WAR-TIME VOLUNTEERS IN HOSPITALS

continued from page 660

students and the organization of the Nursing Staff of the hospital puts a heavy demand on the secretarial staff. Volunteers have been helpful here, also.

Occupational Therapy

Courses for volunteers in this department have been given for the training of aides to the regular occupational therapists. People who are clever with their hands and interested in teaching would find this sort of work attractive.

Out Patient Department

Many persons familiar with the organization of the various clinics can be useful in many ways both in a secretarial capacity or simply to aid patients in getting to the proper place and receiving proper instructions.

Record Room

This department must see that all patients' rec-

ords are complete before they are filed and that this filing is accurately done. The keeping of diagnostic and operation indexes are necessary for clinical research. Statistical information as to hospital patient experience must be compiled. Adequately trained volunteers are very useful here.

Social Service Department

This department is depleted in personnel by loss of members to the Red Cross which recruits social workers for the Armed Forces. The demand for help in social adjustments has diminished very little. Volunteers, even without special training can be very helpful in this department.

Ward Secretaries

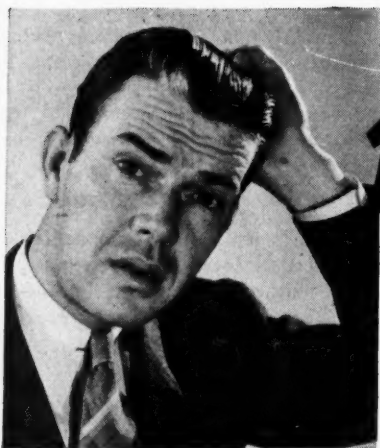
There is a large amount of paper work which each Head Nurse must do both for records of patients and supplies. She must locate personnel on the wards, both the Visiting Staff and interns. A ward secretary can be of great help in managing these affairs and with a little training can do it competently. A volunteer who can work only part of the day is certainly of value here.



BUY *More* WAR BONDS

NARRAGANSETT BREWING COMPANY

CRANSTON, R. I.



DANDRUFF

A PROBLEM your patient rarely discusses

This unsightly, annoying and embarrassing condition—which if allowed to progress may have deleterious effects—can be efficiently controlled by the application of COLLO-SUL* Cream.

The value of sulphur in dandruff, the *acnes*, *seborrhea*, *fungus infections* and *scabies* has long been considered indisputable.¹ However, patients in the past have been unwilling to use this drug because of its objectionable odor . . . a barrier which has been removed in COLLO-SUL Cream, a stable colloidal form of sulphur.

COLLO-SUL Cream . . . is greaseless . . . has an attractive pale-yellow color . . . and a pleasing odor . . . furthermore, does not stain light-colored or white hair.

*Trade-mark Reg. U. S. Pat. Off.

R_y COLLO-SUL CREAM

Sig: Massage into scalp daily, or apply locally as a shampoo until almost dry, then gradually wet with water and rub into a lather. Rinse out with warm water.

¹ Diseases of the Skin: Sutton & Sutton, 1939, p. 99.

CROOKES LABORATORIES, INC. • 305 E. 45th STREET, N. Y.

CROOKES LABORATORIES, INC.
305 East 45th Street
New York 17, New York, Dept. RI

Kindly forward a professional sample of COLLO-SUL Cream.

Name _____

Street _____

City _____ State _____

*In Choosing an Estrogen
consider:*

for

CONVENIENCE

COMFORT

COST

OCTOFOLLIN

Schiffelin Brand of Benzestrol

(2, 4-di-(p-hydroxyphenyl)-3-ethyl hexane)

. . . because it can be administered orally, makes for CONVENIENCE for you and your patient.

. . . because it effectively relieves symptoms and apparently produces no more untoward reactions than do natural estrogens, your patient's COMFORT is assured.

. . . because it is very moderately priced in both tablets and solution, COST, as a possible objection, is ruled out.

OCTOFOLLIN TABLETS
0.5, 1.0, 2.0, 5.0 mg.
Bottles of 50, 100 and 1000

OCTOFOLLIN SOLUTION
5 mg. per cc. in oil
Rubber capped vials of 10 cc

Schiffelin & Co.

Pharmaceutical and Research Laboratories
20 COOPER SQUARE • NEW YORK 3, N.Y.

*Reg. U. S. Pat. Off. The trademark OCTOFOLLIN identifies the Schiffelin brand of Benzestrol.

